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# Educational intervention to develop characteristics of transformational leadership in novice nurse managers

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

AN EDUCATIONAL INTERVENTION TO DEVELOP CHARACTERISTICS OF  
TRANSFORMATIONAL LEADERSHIP IN NOVICE  
NURSE MANAGERS

A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Philosophy

Mary Catherine Goetter

College of Natural and Health Sciences  
School of Nursing  
Program of Nursing Education

May, 2009

This Dissertation by: Mary Catherine Goetter

Entitled: *An Educational Intervention to Develop Characteristics of Transformational Leadership in Novice Nurse Managers*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in College of Natural and Health Sciences in School of Nursing, Program of Nursing Education.

Accepted by the Doctoral Committee

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Date of Dissertation Defense \_\_\_\_\_

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## ABSTRACT

Goetter, Mary Catherine. *An Educational Intervention to Develop Characteristics of Transformational Leadership in Novice Nurse Managers*. Published Doctor of Philosophy dissertation, University of Northern Colorado, 2009.

**Objective:** To support the development of characteristics of transformational leadership (TFL) in novice nurse managers/administrators (NNM) through use of a Journal Club as an educational intervention based on theories of educational psychology and nursing's unique patterns of knowing.

**Research Questions:** Does an educational intervention of a Journal Club increase NNM perceived knowledge of characteristics of transformational leadership? Does an educational intervention of a Journal Club increase NNM perceived ability of self to lead? How do NNM describe the effect of the intervention on their leadership knowledge and ability?

**Design:** Mixed method research approach using experimental, repeated measures design with participants randomly assigned to either a control group or an experimental group. Qualitative assessment was done at the end of the study. Characteristics of TFL were measured using *The Leadership Characteristics and Skills Assessment Tool* (LCSAT) in NNM before and after multiple sessions of a Journal Club. Basic qualitative inquiry was employed to gain more information after intervention sessions were completed

**Setting:** A Magnet-aspiring medical center in a rural mountain west state.

Participants: A sample of 22 NNM with less than 3 years of experience in the management/administrative/educator role.

Results: Repeated measures analysis of variance (ANOVA) showed no increase in perception of knowledge but did show an increase in NNMs' perceived readiness to lead. Qualitative inquiry supported that both knowledge of characteristics of TFL and perceived ability of self to lead were increased in this sample.

Conclusions: An educational intervention of a Journal Club to develop characteristics of TFL can increase knowledge and perceived ability to lead.

Implications: Educators and employers could consider a multi-session Journal Club framed in theories of nursing knowledge and educational psychology as an effective intervention to develop characteristics of TFL in novice nurse managers.

## ACKNOWLEDGEMENTS

To my husband Tim, who has always, always been there.

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## CHAPTER I

### INTRODUCTION

#### Statement of the Problem

Retention of nurses is a priority issue because the profession is currently beset by an unprecedented shortage of nurses at every level (Buerhaus, 2008; Buerhaus, Auerbach, & Staiger, 2007; Donley, 2005; Gallagher, 2008). These shortages are even more pronounced in rural areas: it can take up to 60% longer to fill rural nursing positions (MacPhee & Scott, 2002). Nursing professionals widely acknowledge a number of factors contributing to the shortage: aging of the workforce; lack of representation of the younger-aged, male, and minority candidates entering the profession; lack of doctoral degree-prepared faculty to educate those who do; and a multitude of environmental factors in the workplace that discourage the very heart of nursing (Aiken, Clarke, Sloan, Lake, & Cheney, 2008; Aiken, Clarke, Sloan, Sochalski, & Silber, 2002; Hayhurst, Saylor, & Stuenkel, 2005).

The viability of the profession and the healthcare industry depend upon how nurse leaders and researchers confront this ever-worsening shortage of nursing professionals and the inability to retain them. Ironically, these present-day sentiments echo the 1950 statement of the Chief Nurse Officer of the Public Health Service who recommended “generating a research base through new methods . . . [and] analysis of . . . conditions reducing turnover and promoting job satisfaction, use of management theories in the

healthcare arena, and therapeutic effectiveness of interpersonal relationships” (Leone in Gortner, 2004, p. 107). Clearly, the problems facing the profession have not changed much, nor has the plea for research to address them. What is different 50 years later is the wealth of available research data on leadership styles, particularly on transformational style of leadership (TFL) and its power to change organizational health. Furthermore, the present-day drive to attain Magnet Recognition (American Nurses Credentialing Center, 2005; McClure, Poulin, Sovie, & Wandelt, 1983) has given focus to this call to “use management theories in the healthcare arena [to improve] therapeutic effectiveness of interpersonal relationships.” The research study described in this paper supported this call by investigating the potential effectiveness of a particular management theory; namely, TFL for nursing leaders.

The purpose of this study was to craft an educational intervention to develop characteristics of TFL in novice nurse managers and administrators (NNM) and to determine if this intervention made a difference in their leadership knowledge and ability. However, it is challenging to engage the population of NNM in an ongoing instructional program or research endeavor. Competing priorities and multiple demands on the time of NNM require the researcher to devise a thoughtful approach that yields valuable information, but also respects the limitations of engaging this population in scholarly inquiry in a patient-centered healthcare setting.

Today’s hospitals are increasingly turbulent workplace environments (Havens, Thompson, & Jones, 2008; Tillman, Salyer, Corley, & Mark, 1997), and research with NNM calls for flexibility and adaptability on the part of the researcher. A mixed method research approach was used to design a study seeking to develop characteristics of TFL in

NNM through an educational intervention. The intervention was presented in the context of a Journal Club, which is a gathering of professionals to read and discuss research and literature related to their common practice in order to build knowledge and professionalism (Mikkelsen & Laursen, 2007).

Combining quantitative and qualitative research styles is referred to as mixed method research. There are three rationales for selecting mixed method research: complementarity, incrementality, and enhanced validity (Polit & Beck, 2008). Each of these three rationales as Polit and Beck (2008) define them will be described, and their relevance to this study will be discussed.

Quantitative and qualitative styles complement each other; they represent numbers and words, the two fundamental languages of health communication. Since all methods are fallible, researchers can allow each of the two methods to do what it does best, hopefully averting the limitations inherent in a single approach. This study was limited by a relatively small sample size and contact time due to the researcher's distance from the research setting; complementarity of the two research methods addressed these limitations.

Incrementality refers to the fact that research is an incremental process relying on feedback loops (Polit & Beck, 2008). Each of these two research methods can inform the other, posing questions from which one style can generate more information than the other. In this study, quantitative methods measured participants' knowledge of characteristics of TFL and perceived readiness to lead, while qualitative inquiry added meaning and depth to those measurements and explored the participants' perception of the effectiveness of the intervention.

Mixed method research enhances validity of findings. When the hypothesis or model is supported by multiple and complementary types of data, researchers are able to be more confident in their findings. Using a single research approach leaves the study vulnerable to the various threats to validity. Triangulation of methods was selected in this study to allow for testing alternative interpretations of the data and to strengthen the conclusions.

Polit and Beck (2008) suggest that pragmatism is the most logical argument for mixed method research, simply because certain questions require such an approach. It is counterintuitive to the scientist's search for knowledge if doing so means clinging to one paradigm, such as the traditional postpositivists' or naturalists' mode of inquiry, when that paradigm does not adequately serve the research question. Instead, it is more desirable to permit the research questions to dictate the most practical mode of inquiry.

In this study, selecting only an experimental design over a limited period of time would have been inadequate due to the impracticality of recruiting a sample size large enough for valid quantitative analysis. Thorough qualitative inquiry using ethnographic or grounded theory styles would have required extensive time in the field that was not possible. Therefore, a mixed method approach was employed to answer the following research questions:

Q1 Does an educational intervention of a Journal Club (a meeting of novice nurse managers/administrators to critically discuss research and literature related to transformational leadership) increase NNM perceived knowledge of characteristics of transformational leadership?

Q2 Does an educational intervention of a Journal Club increase novice nurse managers/administrators perceived ability of self to lead?

Q3 How do novice nurse managers/administrators describe the effect of the intervention on their leadership knowledge and ability?

The educational intervention to develop characteristics of TFL in NNM was built on theories of educational psychology and nursing's unique patterns of knowing (Carper, 1978, 2004). The educational psychology theories included the relationship between knowledge and belief (Dole & Sinatra, 1998), self-regulatory learning (Schraw, 2006), and situated cognition, particularly communities of practice (Lave & Wenger, 1990). The intervention was a multi-session Journal Club, which is an example of a community of practice. Research participants were randomly assigned to either a control group or an experimental group. All participants completed a pretest measuring knowledge of characteristics of TFL and perceived readiness to lead. The experimental group met four times as a Journal Club to learn about TFL and discuss development of the characteristics of TFL. A final, fifth evaluation session with the experimental group was held to gather qualitative data on NNM's knowledge of characteristics of TFL and perceived readiness to lead as well as the NNM's thoughts on the effectiveness of the educational intervention. After the intervention was completed, participants in both the control and experimental groups were administered a posttest. Repeated measures analysis of variance (ANOVA) was run and the data were analyzed. A transcript of the final evaluation session was examined for greater depth of information to augment the experimental research findings.

This paper will present a review of the literature relevant to the theories of TFL, educational psychology, and patterns of nursing knowledge. The mixed method research approach by means of experimental design with repeated measurements of TFL characteristics using *The Leadership Characteristics and Skills Assessment Tool* (LCSAT) and basic qualitative inquiry will be described in detail. The results of the data

analysis will be presented; findings of this study will be compared to other research reports cited in the literature review. Recommendations for further inquiry will be suggested.



## CHAPTER II

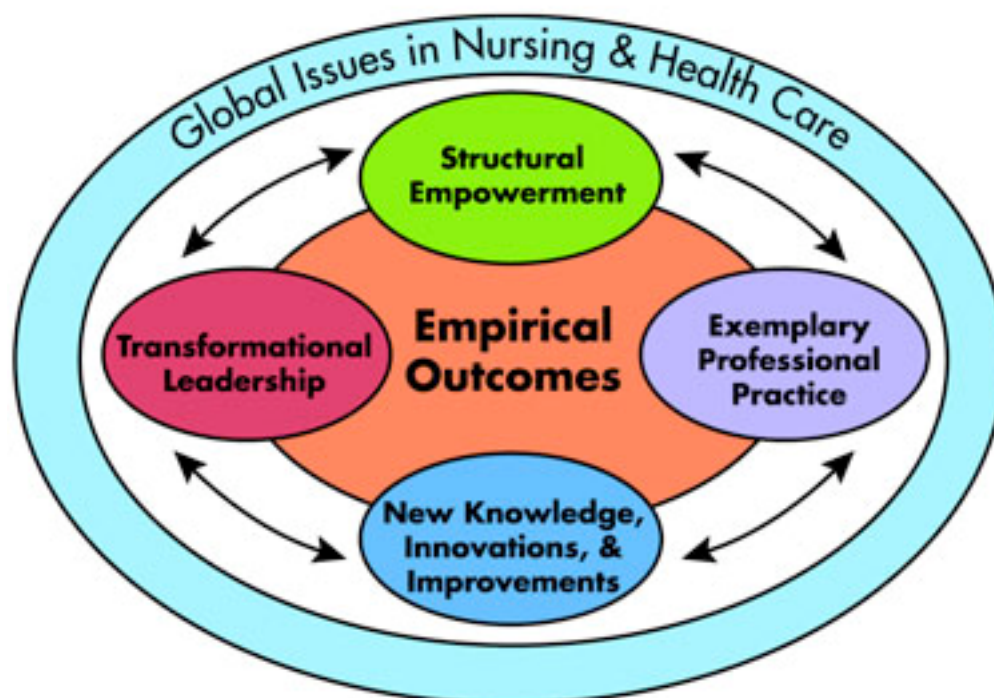
### REVIEW OF THE LITERATURE

#### The Concept of Transformational Leadership: Definitions and Relevance to Nursing

No one solution exists to address all of the ills assailing the nursing profession, but a common thread underlies all possible remedies: the need for decisive and effective leadership throughout the nursing profession. The dilemma for nursing researchers is determining which approach is the most efficacious to rebuilding the profession to a robust stature that will meet healthcare's present and future challenges.

A significant body of work already exists on effective leadership as a model for improving performance in multiple arenas (Burns, 1978; Kouzes & Posner, 2002; Mavrinnac, 2005; McDaniel & Wolf, 1992; Wilson & Porter-O'Grady, 1999). Some authors have posited that TFL presents an excellent model for empowering nurses (Force, 2005; Sofarelli & Brown, 1998; Welford, 2002). Specifically, research on nurse leaders and their relationships with employees and associates has identified a positive correlation between nurse leaders' behaviors and resulting employee satisfaction and retention (Force, 2005; Kalisch & Begeny, 2005; Salt & Profetto-McGrath, 2008). However, there is inadequate nursing research addressing how the specific concept of TFL could impact the problems plaguing the nursing profession. Furthermore, nursing researchers have not actively implemented solutions based on leadership development interventions to address

the retention problem. Recently, the Magnet Recognition Program has been updated to include a model that streamlines the underlying concepts of the 14 Forces of Magnetism to five components (American Nurses Credentialing Center, 2008). The first component is TFL (see Figure 1), but it is left to the Magnet-aspiring facilities to determine how best to develop TFL in its nursing leaders.



*Figure 1.* Five key components of the 14 forces of magnetism (American Nurses Credentialing Center, 2008).

There is a wealth of published editorial and opinion pieces about the value of TFL and the need for leadership development in nursing, but there are very few nursing research studies that explore precisely what needs to be done to achieve leadership development in nurse managers/administrators. Conway and McMillan (2002) hypothesized that formal inclusion of leadership development in nursing education and

professional development programs would ameliorate nursing retention problems, but the researchers do not define how that could occur. Some healthcare organizations may attempt to provide management training such as “Nurse Manager Boot Camp” (William F. Bolger Center for Leadership Development, 2006), but there is a paucity of nursing research or written guidance relating to formal leadership development (Vestal, 2007). A recent survey of nursing and healthcare executives revealed that the need for leadership development is most critical in frontline and midlevel nurse leaders, with only 26% of all leadership development programs aimed at this group (O’Neil, Morjikian, Cherner, Hirschhorn, & West, 2008).

Leadership is defined as “the observed effect of one member to change other members’ behavior by altering the motivation of the other members or by changing their habits” (Bass, 1960, p. 3). TFL is a concept first identified by Burns (1978) in his exploration of political leadership. He recognized TFL as a desirable type of leadership that inspired and motivated followers to a higher moral level. Additionally, Burns identified another style of leadership, transactional leadership (TAL), which he defined as a relationship with a follower that is based on exchanging one thing for another (i.e., salary, promotion, benefits). Burns indicated that he believed TFL was more desirable than TAL.

Bass (1985) further expanded on Burns’ (1978) work by positing that TFL and TAL were not opposing concepts, but rather complimentary leadership styles that could be used synergistically to an advantage. Bass argued that while they are separate concepts, he thought the best leaders exhibited both styles of leadership.

### Transformational Leadership Theory

The current version of leadership theory includes four dimensions of TFL and three dimensions of TAL (Judge & Piccolo, 2004). The four dimensions of TFL are charisma or idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Idealized influence describes leaders who are exemplary role models for associates; inspirational motivation describes leaders who motivate associates to commit to the vision of the organization; intellectual stimulation describes leaders who encourage innovation and creativity through challenging the status quo; and individual consideration describes leaders who act as coaches and advisors to associates (Hall, Johnson, & Kepner, 2002). An example of a transformational leader in nursing would be the nurse executive who compels by personal example, inspires a shared vision among followers, challenges people to give their utmost, and displays personal concern for followers.

The three dimensions of TAL are contingent reward, *active* management-by-exception and *passive* management-by-exception. Contingent reward is the degree to which the leader sets up constructive transactions or exchanges with followers. For example, a nursing leader might clarify which shifts are short staffed and offer a monetary bonus for the staff nurse willing to work those shifts. *Active* and *passive* forms of management-by-exception differ in the timing of the leader's intervention (Judge & Piccolo, 2004). The *active* leader monitors and anticipates follower behavior and makes reinforcing or corrective interactions before problems occur. An example of a transactional nursing leader practicing *active* management-by-exception is one who implements self-scheduling so that nurses with family or personal issues can have control

over their schedule and reduce tardiness and absences. The *passive* leader waits until a problem has already occurred and then takes action, often with a punishing intervention. An example of a nursing leader practicing *passive* management-by-exception waits until a staff nurse exhibits multiple professional violations of tardiness and absences and then acts by suspending or terminating the employee.

A final style of leadership mentioned in the literature is *laissez-faire* (Avolio, 2004; Judge & Piccolo, 2004), which is loosely translated from the French as “let it be.” Since the “leader” ascribing to *laissez-faire* style takes essentially no action, provides no argument, agreement, or clarification, and allows followers to function aimlessly, Judge and Piccolo in their meta-analysis of leadership studies refer to it as “the absence of any leadership whatsoever” (2004, p. 756).

Unfortunately, nursing has a long tradition of placing clinically competent nurses into leadership positions by default (Oroviogicoechea, 1996; Sanders, Davidson, & Price, 1996). Frequently without training, experience or mentoring, these individuals who are thrust into management/leadership positions often fall back on a *laissez-faire* style in hopes of not alienating the subordinates who were their co-workers just a short time before. Compounding the problem is that these clinically proficient individuals are often still expected to provide patient care while learning and assuming leadership positions (Stanley, 2006). This unsound practice in clinical nursing settings has directly contributed to many current problems such as decreased satisfaction and retention of staff nurses.

Considering that present-day interpretations of TFL theory include elements of transactional leadership (TAL), other authors have suggested a new term: “Full Range Leadership” (Avolio, 2004). Clearly, TAL *active* management-by-exception encompasses

many aspects of sound leadership. Supporting this concept is Judge and Piccolo's (2004) meta-analysis of 626 correlations from 87 sources that revealed an overall validity of .44 for TFL and .39 for contingent reward which refers to the close relationship between the two styles of leadership. In fact, the researchers concluded, "Our results reveal that transformational and transactional leadership qualities are so highly related that it makes it difficult to separate their unique effects" (Judge & Piccolo, 2004, p. 765). For the purposes of this research endeavor, the term TFL will include the TAL elements of contingent reward and active management-by-exception, which were noted by Judge and Piccolo (2004) to be indistinguishable from each other.

#### Educational Psychology Theories

Although it is said that "leaders are born, not made," research does not support this statement. In fact, multiple sources agree (Day, Zaccaro, & Halpin, 2004; Leach, 2005; Matey, 1991; C. K. Wilson & Porter-O'Grady, 1999) that TFL can and should be developed in individuals who are in leadership positions. The positive correlation between application of TFL in nurse leaders and satisfaction of nurse followers is clear (American Academy of Colleges of Nursing, 2006; Force, 2005; Huber, 2000; Kalisch & Begeny, 2005; Leach, 2005; Manion, 2004; Mrayyan, 2004). If leaders are made, not born, then the question is: How can characteristics of TFL be developed and cultivated in aspiring nurse leaders?

In the psychological sciences, a wealth of knowledge and theories exist that may inform the decision of how best to provide an educational intervention to develop qualities of TFL in nurse leaders. This research project explored three: (a) the

relationship between knowledge and belief; (b) self-regulatory knowledge; and, (c) situated cognition, specifically, communities of practice.

### *Relationship Between Knowledge and Belief*

Rokeach (1968) defined knowledge as a type of belief with three components: a cognitive component (knowledge); an affective component (e.g., judgment, evaluation, emotion); and a behavioral component, when action is necessary. The educational intervention in this research project was a Journal Club for NNM that included belief and knowledge development incorporating all three of these components.

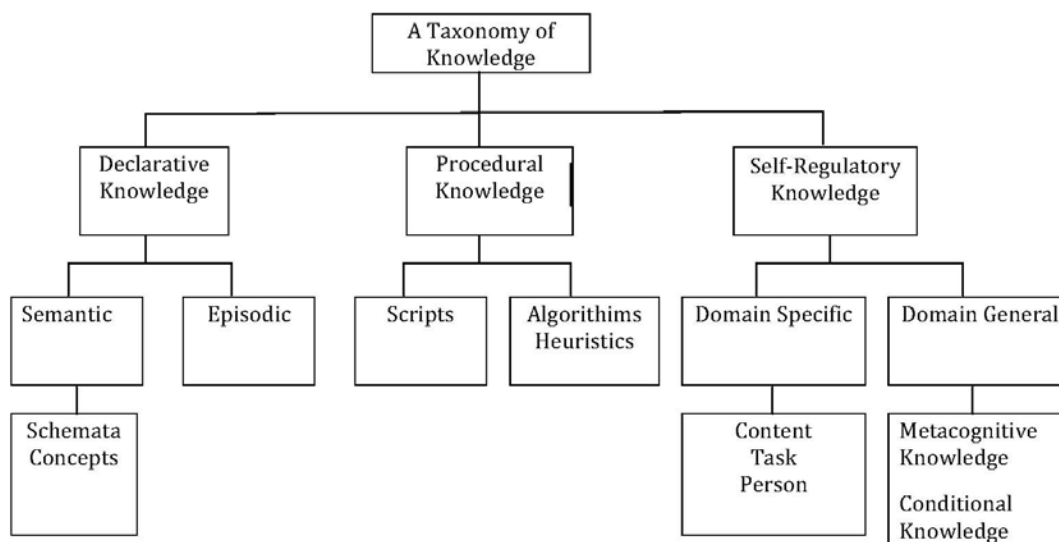
Dole and Sinatra (1998) take both the cognitive and affective components into consideration in their cognitive reconstruction of knowledge model (CRKM). This model suggests that to revise knowledge, both deep cognitive information processing and affective investment are necessary. The authors posit that their CRKM model,

Views affect as a multidimensional construct subsuming components such as interest in the topic, investment in the outcome and personal traits that sustain motivation [e.g., the need to be involved in effortful thinking, evaluation of argument, and analyses of problems and solutions]. (p. 310)

This quote provides an excellent definition of what the educational intervention of a Journal Club sought to accomplish: effortful thinking, evaluation of argument, and analysis of problems and solutions. It also emphasizes the importance of including affective components along with cognitive components. By promoting interest and a learning goal orientation (Wolters & Yu, 1996), the Journal Club format was hypothesized to be more effective than traditional pedagogy in changing existing beliefs about leadership.

### *Self-regulatory Knowledge*

The theory of self-regulatory knowledge suggests practical applications for creating an educational intervention. Schraw (2006) posits a taxonomy of knowledge (see Figure 2) with three arms: declarative (facts and concepts that one knows), procedural (how one does things), and self-regulatory (described below).



*Figure 2.* A taxonomy of knowledge (Schraw, 2006, p. 247).

Self-regulatory knowledge is knowledge about how to regulate one's own memory, thought, and learning. Adult learners bring their lifetime experiences and learning strategies to each new learning situation (Knowles, 1980; Merriam & Cafarella, 1999); self-regulated learners tend to rely on a small repertoire of general strategies such as identifying main ideas, drawing plausible inferences, slowing down for what they consider important information, skipping unimportant information, and summarizing in words or by creating organizers (Duffy, 2002); all of these strategies may be used in flexible ways.



Nurse managers and administrators are a cohort of adult learners who have already demonstrated ability to succeed in the formal academic learning environments that granted them their entry-level degrees. It was assumed that they already have some degree of self-regulated learning ability. An educational intervention of a Journal Club that capitalized on and respected their inherent self-regulatory knowledge and abilities was hypothesized to be more effective than a traditional teacher-centered format that emphasized lecture and PowerPoint presentations.

Three essential skills for self-regulatory knowledge are planning, monitoring, and evaluating one's learning (Schraw, 2006). The planning phase includes goal setting, activating relevant background knowledge, and budgeting time. Monitoring includes self-testing skills to control learning. The evaluation skill refers to appraising the products and regulatory processes of learning. All three of these skill concepts were used in preparing the educational intervention of a Journal Club for this cohort, as will be further explained in the intervention section.

### *Situated Cognition and Communities of Practice*

Situated cognition is another school of thought from the field of educational psychology that may inform an educational intervention to develop leadership characteristics. Jean Lave's theory of situated learning or cognition, states, "Learning normally occurs as a function of the activity, context and culture in which it occurs" (Lave & Wenger, 1990, p. 32). While Lave is often credited as the modern originator of this theory, it actually dates back to the time of John Dewey, famous for his revitalization of education a century ago (Higgin, 1999). Dewey was adamant that learning resulted from experience and social interaction.

In a qualitative study with senior nursing students, Grossman (2007) found that participants eschewed learning leadership from observation or classroom activities, but also sought real-life practice experience, professional social interaction, and mentorship within the professional setting. While Grossman's study was with student nurses and not working professionals, it does support the idea of engaging the learner's active participation directly in the workplace setting, a concept that is the heart of situated cognition.

One pathway towards situated cognition is through the concept of "communities of practice" (Anderson, Reder, & Simon, 1996). The very nature of nursing management and leadership in a hospital is community oriented; the units of a hospital share resources, staff, and ideas. NNM are familiar with relying on one another's experience and social interactions to learn their roles. A Journal Club provided a formal structure to an informal group dynamic that already existed in the hospital culture.

Wenger (1998) presents the concept of a community of practice as a model of situational learning based on collaboration among peers, where the participants work together toward a common goal which is defined by knowledge, rather than task. Unlike learning management skills, which are defined by task-based objectives (Grossman, 2007), development of the characteristics of TFL requires an educational approach that strives for new knowledge development, not merely task or skill acquisition. The constructivist view of communities of practice that emphasizes the importance of context-specific learning within the workplace (Smith & Ragan, 1999) was particularly germane to this educational endeavor. While the original concept of communities of practice was not specifically intended for nursing, and indeed, is not widely used in

nursing, its applicability for nursing is being explored more frequently (Andrew, Tolson, & Ferguson, 2007).

The blending of both situated and cognitive educational strategies has been critically examined and debated by educational psychologists. Cognitive approaches to knowledge development relate to processes and structures that occur at the individual level, while situated approaches focus on interactive systems that include individuals as participants. However, incorporating both perspectives, as this educational intervention was designed to do, was intended to produce a synergistic effect (Greeno, 1997). The preceding theories of educational psychology provided a framework for constructing an educational intervention of a Journal Club and were further enhanced by considering nursing knowledge and unique patterns of knowing (Carper, 1978, 2004).

#### Nursing Knowledge and Patterns of Knowing

Science has been defined as the quest to describe, understand, predict, control, or explain phenomena (Silva, 2004). Nursing science is further defined as “the body of codified understanding of human biology and behavior in health and illness, with particular attention to response states” (Barnard, 1980, in Gortner, 2004, p. 108). This latter definition encompasses Carper’s (2004) fundamental patterns, or “ways of knowing” in nursing, which are identified as empirics, aesthetics, personal knowledge, and ethics. While Carper identified empirics only as the “science of nursing” (2004, p. 221), true understanding of human biology, behavior, and response states requires use of aesthetics and personal knowledge. Furthering the argument that ethical knowledge also contributes to the scientific base of the profession, Connor (2004) presents praxis and phronesis as a process of moral reasoning to develop ethical knowledge.

Praxis is a Greek word meaning “action with reflection” (Vella, 2002).

Phronesis is a popular Aristotelian concept that emphasizes deliberation and moral action (Flaming, 2001). It is a more encompassing view of knowledge and knowledge development than simply accepting something as true because it is research- or evidence-based. Connor (2004) posits integrating praxis and phronesis (“practical wisdom” in her terms; knowledge and reflection gained from day-to-day experience) into the development of nursing knowledge as an “advancement of nursing as a moral endeavor and the nurse as moral agent” (p. 54). Flaming (2001) goes so far as to suggest that phronesis should replace the concept of research-based practice because research-based practice limits nursing knowledge to the empirical way of knowing only and phronesis is a more pragmatic and realistic view of the way nurses develop knowledge in everyday practice. This not only supports Carper’s (1978, 2004) unique ways of knowing, but also reflects the philosophies of educational psychology theory foundational to this proposal.

James (1955), one of the fathers of 20<sup>th</sup> century pragmatism and educational psychology, suggested that practical consequences should guide action. Dewey (1933), another pragmatist and educational psychologist, steadfastly held that reflective thinking is crucial to deliberating pragmatic consequences. Dewey (1950) later wrote that he highly valued experience and believed experience itself could provide organizing principles and directive ends.

Current views of nursing science and research platforms embrace all these aspects of knowing as contributing to the foundation of the profession (Fawcett, 2004). Furthermore, nursing research in the 21<sup>st</sup> century includes inquiry beyond health, illness, and response rates of individuals. The health, illness, and response rates of the nursing

profession itself are subject to the inquisitive researcher's scrutiny. Past and present views of nursing knowledge development, nursing's unique ways of knowing (Carper, 2004), and the additional perspective of theories from educational psychology provided a research platform for investigating NNM prior knowledge and development of new knowledge of the characteristics of TFL.

### Research Questions

As stated earlier, the development of TFL within the nursing profession presents a promising solution to the retention problems outlined above. However, research is needed on how TFL theory can be developed and how characteristics of TFL can be fostered in NNM. This study proposed to investigate the effectiveness of an educational intervention based on principles of educational psychology and invoking nursing's unique ways of knowing (Carper, 1978, 2004). To review, the research questions explored in this endeavor were as follows:

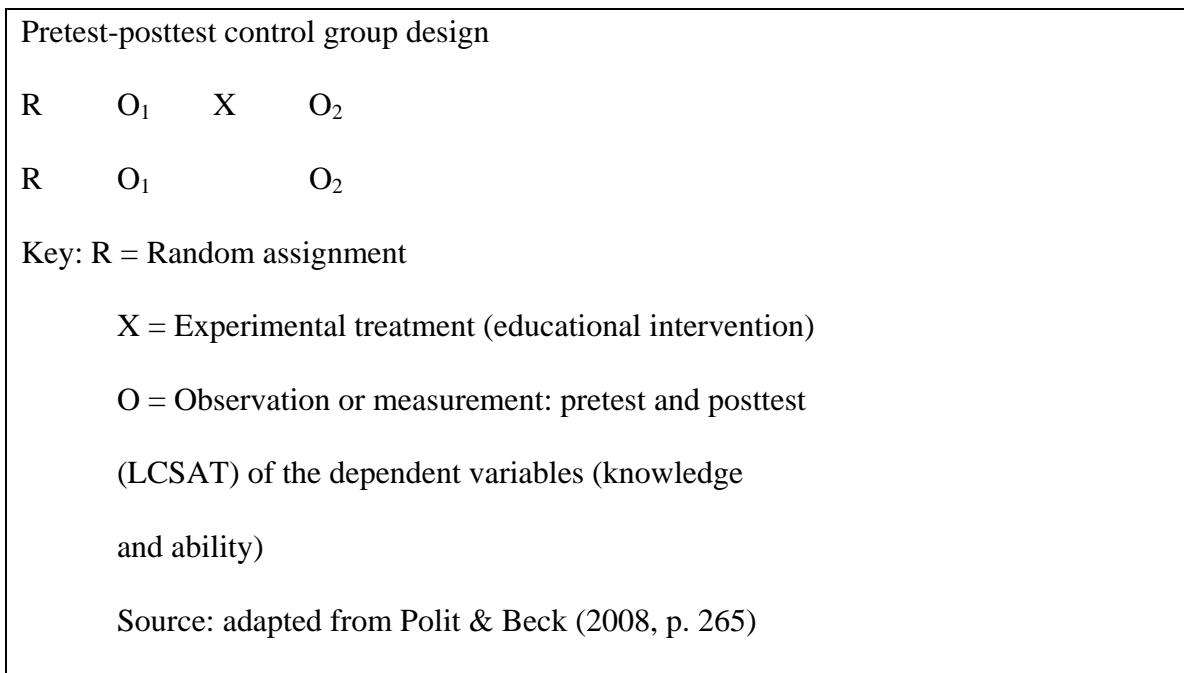
- Q1 Does an educational intervention of a Journal Club (a meeting of novice nurse managers/administrators to critically discuss research and literature related to transformational leadership) increase NNM perceived knowledge of characteristics of transformational leadership?
- Q2 Does an educational intervention of a Journal Club increase novice nurse managers/administrators perceived ability of self to lead?
- Q3 How do novice nurse managers/administrators describe the effect of the intervention on their leadership knowledge and ability?

## CHAPTER III

### METHODOLOGY

#### Introduction

The theories of transformational leadership, educational psychology, and nursing's patterns of knowing have been presented as a framework for developing TFL in NNM in a Magnet-aspiring hospital (American Nurses Credentialing Center, 2005). A mixed methods approach began with an experimental design consisting of an intervention condition (Journal Club) and a control condition. The educational intervention of the Journal Club invoked nursing's unique patterns of knowing and addressed the "motives, intentions and traits of character" that Carper stressed (2004, p. 226). Analysis involved repeated measurements of two dependent variables: (a) perceived knowledge of characteristics of TFL, and (b) perceived ability of self to lead (see Figure 3). The measurement tool was *The Leadership Characteristics and Skills Assessment Tool* (LCSAT) (Grossman, 2001). Participants also completed a short demographic survey at the beginning of the study and a researcher-designed evaluation at the end of the study. Basic qualitative inquiry augmented findings with informants' perceptions of the effectiveness of the intervention on their leadership knowledge and ability.



*Figure 3.* Experimental design: Educational intervention to develop characteristics of TFL in NNM.

### Sample

The target population for this study was NNM, defined as nurse managers, administrators, or educators with less than 3 years of experience in the leadership position. The accessible population was NNM in a rural medical center in a mountain west state. The sample for this study was comprised of NNM with 3 years or less in the role of manager, administrator, or educator in a rural regional medical center that is actively engaged in the pursuit of Magnet Recognition. In the Fall of 2006, previous qualitative inquiry (Goetter, 2006) was conducted among NNM in a similar facility (rural regional Medical Center in the same state also actively engaged in pursuit of Magnet Recognition) to determine NNM perceptions of a prior nursing leadership/managerial development program, “Nurse Manager Boot Camp.”

Nurse Manager Boot Camp is a 5-day out-of-state training program for NNM that emphasizes rudimentary managerial skills such as budgeting, staffing, scheduling, and human resource management (William F. Bolger Center for Leadership Development, 2006). Interpersonal relationships are briefly touched on, but true leadership development is not directly addressed. Concerning leadership and management training for mid-level managers/administrators, senior hospital administrators often appear to expect that this type of intensive weeklong residential course and other similar leadership development programs will provide NNM with the skills necessary to succeed in their positions (O'Neil et al., 2008).

In one Magnet-aspiring rural medical center, a qualitative pilot study revealed that NNM, while appreciating the procedural knowledge gained in Nurse Manager Boot Camp, desired ongoing support and mentorship to develop the traits they had identified as valued for their personal leadership development (Goetter, 2006). This is supported by other research that found mentoring of nurse managers improved staff nurse retention and satisfaction (Bally, 2007).

A second pilot study with a quasi-experimental design was conducted with NNM and staff educators in the same facility, the purpose of the study being to test one possible venue of support and peer mentorship. An educational intervention in the format of a four-session Journal Club was provided to promote development of characteristics of TFL (Goetter, 2008). The LCSAT tool was used as a pre- and post-measure. The sample was too small ( $n = 7$ ) to detect quantitative significance, but qualitative responses indicated that a Journal Club was perceived as being helpful to this group of NNM.



### *Sample Size*

In causal-comparative and experimental research, each group to be compared should consist of a minimum of 15 participants (Gall, Gall, & Borg, 2007). For relatively small rural medical centers, achieving this sample size can be problematic. In the two pilot studies done by this author in anticipation of the proposed study, it was a challenge to solicit a sample of NNM of adequate size. In both endeavors, 14 NNM met eligibility criteria (3 years or less in the manager/administrator role) at the study facility and were solicited to participate. However, initial response from the NNM in both studies was unenthusiastic, with conflicting commitments cited most often as the reason.

In the first qualitative pilot study, a small sample size ( $n = 3$ ) was accepted. For a pilot study involving small scale testing of the procedures and ideas to be used in the main study, two to three participants may be sufficient (Gall et al., 2007). In the second study, since an intervention was being used, a larger sample size was desired, so clinical educators in the Workforce Development department were invited to join. The problem of low participation from NNM who are extremely pressed for time and hesitant to commit to an ongoing research study has been noted by other researchers and was similarly solved by including educators as participants (Phelps, 2005). Since nurses in educator positions serve in a definite position of leadership, with corresponding administrative responsibilities, it was believed their participation would be appropriate and beneficial to the individual participants as well as enhancing the group dynamics.

At the onset of the second pilot (intervention) study, six NNM and five clinical educators agreed to participate, providing a total sample of 11. Citing competing commitments and inadequate time to continue, four of the NNM withdrew from the study

in the ensuing weeks. This left a final sample of five educators and two NNM ( $n = 7$ ).

This was too small of a sample to yield valid quantitative results, but qualitative survey data validated the approach as useful to NNM and educators' development of knowledge of characteristics of TFL and perception of increased readiness to lead.

A different site was selected for the present research study, and all eligible NNM (3 years or less in the manager/administrator/educator role) were solicited to participate. Information from the Chief Nursing Officer (CNO) of the research facility indicated a sampling frame of approximately 55 nurses in a manager, administrator, or educator role. Only the NNM who had been in the role less than 3 years were solicited. It was anticipated to achieve an  $n$  of ~40, with half being randomly assigned to the control group, and the other half being randomly assigned to the intervention group. This would have satisfied the requirement for a minimum of 15 participants in each group. In fact, a total of just 27 NNM and educators consented to participate.

The optimal size of a small group for a collaborative learning environment is somewhat debatable, depending upon the intended purpose of the group. Psychological research in the area of organizations and groups sheds some light on how to ascertain the best group size. In a study of senior-level executives receiving executive development, five- or six-person teams were determined to be an efficacious size to meet the developmental intervention's goals (Glaman, Jones, & Rozelle, 1996). Focus groups are another common small group featured in qualitative research; optimal focus group size is between 5-12 members (Carey, 1994). However, the purpose of a focus group is different than one formed for an educational intervention, so the upper limit of 12 persons would be too large.

As far as the sharing of ideas, knowledge, competencies, and information in collaborative work situations within the workplace, three to six participants are the recommended norm (Lowry, Roberts, Romano, Jr, Cheney, & Hightower, 2006). However, these researchers found that while the overall quality of the discussion was unchanged between groups of three or six members, three-person groups maintained higher levels of communication quality for the variables of appropriateness, openness, richness, and accuracy. To enhance interactive dialogue as opposed to monologue, or one dominant person monopolizing communication, Fay, Garrod, and Carletta (2002) found that small groups should not exceed five persons.

Issues of practicality and feasibility also influence decisions about optimal group size. Conducting an intervention study with a sufficient sample size and assigning three-person groups was not practical for this study, since the researcher was the only facilitator. In the experimental pilot study, participants in the group of seven members expressed the feeling that a three-person group was too small (Goetter, 2008). For this study it was planned to form intervention groups of six to eight members, given the probability that attrition would result in an ultimate *n* of five to six persons per group. However, in the event that low numbers of participants were solicited or attrition was high, it was considered that groups as small as three to five would have been the end sample.

After approval was obtained from the Institutional Review Boards (IRB) of the University of Northern Colorado (Appendix A) as well as from the regional Medical Center (Appendix B), participation of NNM and educators who had been in the leadership role 3 years or less was solicited. A master's prepared clinical nurse specialist

(CNS) employed by the regional Medical Center agreed to be the on-site contact for the study and to contact eligible participants. The CNS distributed informational flyers (Appendix C) inviting NNM and educators to participate in nursing research with the caveat that participants would be randomly assigned to either an intervention or control group; it was stated that those in the control group would not receive the leadership education. The flyer briefly described the study as a four-session Journal Club with an optional fifth evaluation session. The incentive to participate was an opportunity to learn about leadership during paid duty hours and obtain continuing education hours.

In the recruitment session, the researcher was available on-site to answer questions and obtain informed consent (Appendix D) from interested NNM and educators. A total of 17 NNM and educators came to meet the researcher and hear more about the study, and all of them enrolled; another 10 were either off-site or off duty that day, but had expressed desire to the CNS to participate. The CNS and her assistant obtained the completed consent forms from these individuals.

After signing the consent form, individuals were given a coin to toss with “heads” being assigned to the intervention group and “tails” to the control group. Participants who were off site or off duty were also randomly assigned by a coin toss. Per prior discussion with the Chief Nursing Officer of the regional Medical Center, participants in the control group were informed that the intervention of the Journal Club would be repeated by the researcher at a later date at no charge if hospital administrators so desired. This was to reduce resentful demoralization of individuals in the control group who may have felt they were denied a desirable opportunity (Gall et al., 2007).

Thirteen participants were assigned to the intervention group, and 14 to the control group. Participants randomly assigned to the intervention group were allowed to self-select which of the two sub-groups they desired; this was to promote their future ongoing participation by allowing them their timeframe of choice. Two sub-groups of six and seven each were created.

### *Sample Demographics*

As stated above, 27 NNM enrolled in the study, with 13 randomly assigned to the intervention group and 14 to the control group. However, as was anticipated, attrition was a problem for this study. From the intervention group, three participants withdrew: one pulled out immediately at the start of the study after being selected for jury duty; one indicated to the CNS that she wanted to withdraw after attending the first session; another attended the first session, but had to miss the second for a planned vacation and did not return. From the control group, two participants did not return the posttest: one was reported to have a family illness; no reason was given for the second participant. This was an 18.5% attrition rate, yielding a remaining total of 22 participants. Statistical analysis was done for those 22 participants, all of whom provided complete data consisting of the demographic survey, LCSAT pretest, and posttest.

Demographic data of this final sample of 22 participants are reported here (Table 1). There were no significant differences between the control and experimental groups in terms of years of experience as a nurse, years of experience as a nurse manager,

participation in formal training for nurse managers, length of time since such training, gender, age, and education. The only significant difference found was for the variable of mentoring ( $\chi^2 = 7.25, p = .011$ ). A significantly higher number of participants in the control group responded “yes” to the question: “Do you currently feel that you are in a relationship where you are being mentored as a nursing leader?”

Table 1

*Sample Demographics*

| Indicator   | Control Group | Experimental Group | Total | $\chi^2$ |
|---|---------------|--------------------|-------|----------|
| Yrs as Nurse                                      |               |                    |       | .373     |
| Mean  | 9.7           | 12.6               | 11.0  |          |
| N   | 12            | 10                 | 22    |          |
| Std dev   | 6.5           | 8.4                | 7.4   |          |
| Yrs as NM   |               |                    |       | .265     |
| Mean  | 1.5           | 1.9                | 1.7   |          |
| N   | 12            | 10                 | 22    |          |
| Std dev   | 0.9           | 1.0                | 1.0   |          |
| Attended formal nurse manager leadership training |               |                    |       | .236     |
| Yes, within past 1 year                           | 33.3%         | 10.0%              | 22.7% |          |
| Yes, within past 2 years                          | 8.3%          | 0.0%               | 4.5%  |          |
| No  | 58.3%         | 90.0%              | 72.7% |          |
| Has current mentoring relationship                | 33.3%*        | 90.0%              | 59.1% | .011*    |
| Gender  |               |                    |       |          |
| F   | 100%          | 100%               | 100%  |          |
| M   | 0%            | 0%                 | 0%    |          |
| Age   |               |                    |       | .728     |
| 25-35   | 41.7%         | 40.0%              | 40.9% |          |
| 36-45   | 41.7%         | 30.0%              | 36.4% |          |
| 46-55   | 16.7%         | 30.0%              | 22.7% |          |
| >55   |               |                    |       |          |
| Nursing education                                 |               |                    |       | .632     |
| ADN   | 50.0%         | 50.0%              | 50.0% |          |
| BSN   | 41.7%         | 50.0%              | 45.5% |          |
| MSN   | 8.3%          | .0%                | 4.5%  |          |
| Non-nursing education                             |               |                    |       | .632     |
| BS/BA   | 16.7%         | 20.0%              | 18.2% |          |

\*  $p < .05$

### Intervention

The participants assigned to the intervention group were asked to commit to meeting as a Journal Club for 90 minutes on four separate occasions. The concept of a Journal Club was first documented by Sir William Osler in 1875 and was evident in medical education in the early 1900s (Linzer, 1987). Designed to enhance critical thinking and appraisal skills, Journal Clubs are currently used in the fields of medicine, pharmacy, and nursing. Goodfellow (2004) observed that a Journal Club encouraged use of evidence-based practice among nursing students and staff nurses, as well as promoted professionalism and positive attitudes. In a study done by the American Association of Critical Care Nurses, Journal Clubs were featured as a valuable tool to promote evidence-based practice among critical care nurses (Ciliska, Pinelli, DiCenso, & Cullum, 2001). In its essence, a Journal Club is a gathering of professionals to read and discuss research and literature related to their common practice in order to build knowledge and professionalism (Mikkelsen & Laursen, 2007).

In this study, the Journal Club provided a context for the educational intervention. Contextual aspects of the learning environment are critical to the success of an educational endeavor. Positive effects of collaborative reasoning and argumentation have been recognized to promote high-level understanding (Murphy & Mason, 2006). In this educational intervention, participants were encouraged to use collaborative reasoning and argumentation as they considered prior knowledge about leadership and developed new ideas about TFL and their perceptions of their ability to lead.

The Journal Club consisted of four 90-minute sessions with each session designed around one of the four dimensions of TFL: charisma or idealized influence, inspirational

motivation, intellectual stimulation, and individualized consideration. Participants were given one to three brief pieces of nursing literature (germane to the dimension of TFL being highlighted) before the session and provided with a workbook of definitions, references, and sample discussion questions (Appendix E) to consider before gathering together. Sample questions and discussion points included statements such as, “Think about and discuss a time when you have taken a risk in establishing trust among your colleagues,” and “How do you seek clarification from your colleagues when solving problems?”

The research articles, poems, readings, and questions were selected to incorporate all of the patterns of nursing knowledge (Carper, 1978, 2004). For example, one article was chosen to promote the ethical pattern of knowledge (Milton, 2004), the poem “If” (Kipling, 1910) was used to stimulate aesthetic pattern of knowledge, a case study (Vivar, 2006) was employed to provoke thought on empirical pattern of knowledge, and an article that presented mentoring as a gardening metaphor (Wilson, Leners, & Fenton, 2005) illustrated personal pattern of knowledge.

Simulations and games provide safe conditions to practice leadership (Day et al., 2004), and icebreakers provide an opportunity to help participants become acquainted. Brief icebreaker activities of approximately 5 minutes each (Gibbs, 2001) were provided for the first two sessions. The participants’ responses to these activities provided qualitative data that had not been anticipated, but were considered in interpreting the results.

For the first icebreaker activity, each participant was given a crayon, and the group was directed to work together in silence to draw the “ideal nurse leader” in just 1



minute. This simple exercise brought much laughter and served to relax the group.

Participants were then asked to state out loud what they felt was the single, most important characteristic of leadership. Each participant's response was written in crayon on the drawing that was then placed on the center of the table as a reference at that session and each subsequent session.

The second activity, presented at the second session, was a role-play that asked participants to pair off in twos and sit knee-to-knee facing each other. One person in each dyad was asked to assume the role of a staff nurse and state in 1 minute why she was resigning from the hospital. The other person assumed the role of the nurse manager and was instructed simply to listen. After 1 minute, the person playing the nurse manager role had to paraphrase back to the "staff nurse" what she had just heard. Then the "nurse manager" had one minute to tell the "staff nurse" why she should consider remaining an employee at this hospital. In return, the "staff nurse" then had to paraphrase back what she had just heard. In the group with an uneven number, the researcher played one of the roles. This activity served as both a further icebreaker and a valuable listening exercise. By the third session, the participants had already demonstrated sufficient comfort and familiarity with one another, and no further planned activities were provided.

In all sessions, the researcher acted as a facilitator to encourage critical reflection, collaborative reasoning, and argumentation on the session topics. This type of dialogue encouraged deliberation on pragmatic consequences of leadership styles and behaviors. Discussion was prompted to enhance the reflective thinking and development of new knowledge that Murphy and Mason (2006) posit.

## Data Collection Procedure

### *Quantitative Data Collection*

After informed consent was obtained, participants were asked to fill out a brief demographic survey (Appendix F) and *The Leadership Characteristics and Skills Assessment Tool* or LCSAT (Grossman, 2001, 2007) (Appendix G) at the enrollment session. The CNS and an administrative assistant distributed the demographic surveys and LCSAT to the participants who were off site or off duty on the day of the enrollment session and collected them before the first session of the Journal Club.

After the four sessions of the Journal Club were completed, all participants in both the intervention and control groups were given the LCSAT as a post-assessment. At the final session, participants in the intervention group were given the LCSAT and a course evaluation (Appendix H) in a sealed envelope, seeking both quantitative and qualitative data. These participants were asked to complete the LCSAT and evaluation within the next week, but not the same day as the final session in order to allow reflection time. Participants in the control group were sent the LCSAT post-survey in a sealed envelope sent to their workplace mailboxes. All participants in both groups were provided written instructions to return the completed surveys (and course evaluations if they were in the experimental group) to an envelope outside the administrative assistant's office. The surveys for all participants were coded so that only the researcher would know the identity of the person who completed it. This was to protect the confidentiality of all participants and promote return of the surveys.

Return of follow-up surveys in a repeated measures experimental design taking place over an extended period of time can be a problem for the researcher due to attrition,

forgetfulness, and other human behavior factors (Gall et al., 2007). Steps were taken to minimize this problem by trying to strengthen research participants' commitment to the study and development of a collaborative relationship with the researcher. Incentives were also used as appropriate.

To enhance participation and survey return, participants in the intervention group were offered 10 continuing education contact hours, earned only by attendance at all four sessions of the Journal Club. Providing 10 contact hours for 6 hours of actual instructional "seat time" was allowable because of the time required for reading the articles and other materials outside of the Journal Club. Participants in the control group were offered a \$5 gift card for a local coffee shop if they returned the completed posttest survey.

#### Quantitative Data Collection Instrument

The *Multifactor Leadership Questionnaire* is one of the most widely used instruments available for measuring traits consistent with TFL in the organizational sciences (Mindgarden, 2007), but the instrument is not specific to nursing and costs \$25 per person to administer. Grossman (2001, 2007) developed the LCSAT in response to the dearth of nursing specific leadership measures. Two dependent variables--perceived definition of leadership and perceived leadership ability of self--were measured after Grossman (2001) conducted a concept analysis of the following themes: creativity, adaptability, risk-taking, vision building, conflict management, credibility, and empowerment. These themes can be seen to relate to the four dimensions of TFL as follows: credibility--charisma or idealized influence; vision building and risk-taking--

inspirational motivation; creativity and conflict management--intellectual stimulation; and empowerment and adaptability--individualized consideration (Table 2).

Table 2

*Relationship of LCSAT Themes to Dimensions of TFL*

| LCSAT Themes        | Dimensions of TFL            |
|---------------------|------------------------------|
| Credibility         | Charisma                     |
|                     | Idealized influence          |
| Vision building     | Inspirational motivation     |
| Risk taking         |                              |
| Creativity          | Intellectual stimulation     |
| Conflict management |                              |
| Empowerment         | Individualized consideration |
| Adaptability        |                              |

The LCSAT has two parts: Part 1 consists of 20 statements that measure the individual's perception of what makes a good leader; and Part 2 consists of 20 statements that measure the perception of the individual's own leadership readiness (Appendix G). Internal consistency as measured by Cronbach alphas range from .77 to .88. (Grossman & Valiga, 2005).

The LCSAT was developed for senior baccalaureate nursing students (Grossman, 2007). This researcher tested the LCSAT with NNM and educators in a pilot study in preparation for this research endeavor (Goetter, 2008). Personal email communication with Dr. Grossman (January 31, 2008) expressed permission to use the tool.

As stated earlier, the sample size in the pilot study ( $n = 7$ ) may have been too small to show an effect with quantitative analysis. However, qualitative data in the form of course evaluations and a final evaluative discussion indicated that the participants found the Journal Club intervention helpful for their own personal leadership development. They also expressed satisfaction with the LCSAT, and indicated they found taking the assessment enjoyable and intellectually provocative.

Further quantitative data in both the pilot and this study were collected on the final written evaluation (Appendix H) in the form of questions to which the respondents answered on a 4-item Likert scale. Questions asked participants to rate such factors as readability of materials, quality of teaching materials, the instructor's effectiveness, and the learning environment. Participants could select a response from 1 (not well/poor) to 4 (very well/excellent).

### Qualitative Data Collection

Due to the anticipated small size of the sample, it was known from the outset that qualitative data would be required to address aspects of the information being sought that could not be captured by quantitative data alone. The methods of data collection in qualitative research studies include observation, interview, and document review (Merriam, 1998). In this study, qualitative data were formally obtained from the intervention group in two ways: responses to open-ended questions on the written post-intervention evaluation form (Appendix H) and the final optional evaluation session. The qualitative data obtained from the written evaluation form included open-ended questions such as, "What did you like least (and most) about the program?," and "The one thing that could help me develop my leadership skills is\_\_\_\_\_."

These methods were chosen because the constructivist framework relied upon an open-ended approach in order to encourage participants to share their own ideas, experiences, and prior knowledge, and also to explore new knowledge development. Qualitative research relies on significant interaction with the participants in order to establish the rapport necessary for informants to feel comfortable in being genuine in their responses (Creswell, 1998). The duration of the study was limited to weekly contacts over the course of 6 weeks. This is a relatively short period of time to create the trust required for participants to open up and provide depth of response.

Both of the pilot studies done previous to the present study were in a setting where the researcher was employed and knew most of the participants. This was a limitation of the pilot studies because qualitative research done in the researcher's "backyard" adds a level of bias with the possibility that participants may give different responses than if they were with a stranger (Creswell, 1998). However, the reverse of that situation occurred in the present study, in which the participants and researcher did not know each other at all, which could be a limitation in establishing rapport. The researcher attempted to overcome this limitation by seeking commonalities with the informants in multiple ways: dressing in business casual attire, sharing background stories of similar nursing experiences, and inquiring about small personal details such as pets and children which had been alluded to in discussion.

The facilitator asked questions during the intervention and evaluation sessions when clarification or further elucidation of knowledge was needed. This was to attain accuracy as well as to flesh out responses and try to achieve the richness of data that is the hallmark of qualitative research (Merriam, 1998). Qualitative information also

included the researcher's observations of participants' body language and emotional responses during the two icebreaker activities and general group interactions. Most of the participants did not know each other very well, so there was a double challenge of establishing trust and rapport between the researcher and the participants, as well as among the group members themselves. It was not easy at times to strike a balance in creating rapport, while still keeping the focus on the participants; however, the icebreaker activities and discussion questions aided in developing group dynamics. A mid-session refreshment break provided at all sessions also encouraged spontaneous sharing of information. By the final session, rapport was evident in more relaxed body language, comfort with emotionality of some participants, and humorous exchanges.

Merriam (1998) stresses the importance of simultaneous data collection and data analysis. During the 6-week period of time while the enrollment, intervention, and final evaluation sessions were occurring, the researcher was listening to and observing participants, jotting notes, and, after the final session, transcribing the final audio-taped discussion.

During the data collection period, the researcher also engaged in reflective thinking to aid in the process of critical review and insight that is crucial for the researcher to absorb, make sense of, and understand the data. Throughout the process, mentors were consulted to discuss impressions and develop further insight. This kind of peer review or debriefing is the review of data and the research process by others who are familiar with the phenomenon being explored (Creswell & Miller, 2000). In addition to the researcher's committee members, a fellow professional experienced in nursing research with whom the researcher had daily contact was consulted. Issues that were

frequently discussed included enrollment procedures, collaborating with the onsite liaison, encouraging attendance, and drawing the participants out to promote rich discussion.

Basic qualitative inquiry was used to seek additional information to answer the research questions. Even with the relatively limited qualitative data this study yielded, the constant comparative method was helpful in sorting the data. This technique guides the researcher to use all information gathered from observation, interviews, field notes, and participant contacts and to regularly compare the data. These comparisons lead to tentative categories that are then compared with each other and with past and future data; this process allows the researcher to formulate new ideas and avenues of inquiry as the study progresses (Merriam, 1998). In this case, incidents, comments, and participant stories gleaned from all of the intervention sessions were identified and compared with participant responses from the final audio-taped evaluation session.

Creswell (1998) describes all of these processes as integral to the data analysis spiral, where “the researcher engages in the process of moving in analytic circles rather than using a fixed linear approach” (p. 142). Saturation was not reached. While some themes were clearly repeated, all of the participants brought new ideas and insights to light in the evaluation session. Time constraints and the triangulated design of this project did not allow for seeking more qualitative information, so data were analyzed with the understanding that qualitative data collection did not reach a point of saturation. Nonetheless, the data provided valuable insights and information.

The final evaluation session was audio-taped and transcribed verbatim. Qualitative studies generate copious data. In this case, only the final session was formally



recorded and transcribed. Data were reviewed during the process of actually transcribing the informants' words to paper, a process completed over the course of 4 days within 1 week after the final session. Listening to the tape over and over and simultaneously typing the dialogue was a painstaking process; this ensured accuracy of transcription as well as the researcher's immersion in the data. It is this rapt attention to the informants' stories and words that allows the researcher to truly analyze the data and seek the meaning behind the words.

After the data collection phase was finished, all of the data were reviewed in order: leadership traits identified by participants in the first session, field notes and journal entries made by the researcher, written final evaluations, and the transcript of the final evaluation session were all read through. Then the transcript was read and re-read in search of recurring themes and words. This was compared to the key leadership traits the participants named during the first icebreaker session and notes taken by the researcher immediately following the sessions. During this period of immersion in the data, codes and repetitive themes were identified. The researcher sought to crystallize the issues and evidence of new knowledge that the participants brought forth. This process of qualitative data analysis is highly intuitive and the researcher cannot always definitively pinpoint where an insight (that may later be a finding) came from or how relationships among data were discerned (Merriam, 1998).

### Reliability and Validity

#### *Quantitative Instrumentation*

Considering the quantitative data collection instrument, Grossman and Valiga (2005) report reliability of the LCSAT as internal consistency measured by Cronbach's

alpha coefficients ranging from .77 to .88. Internal consistency is an approach to estimating test score reliability involving examination of individual items of the test or instrument (Gall et al., 2007). Various methods can be used to approximate a test's internal consistency. Each method involves an analysis of scores from a sample of individuals on one administration of the test. Cronbach's alpha coefficient ( $\alpha$ ) can be used when items on a measure are not scored dichotomously, such as the multiple choice items on the LCSAT; each item is a statement that offers a choice of four possible responses.

When items are used to form a scale, such as Grossman and Valiga's (2005) LCSAT, the items need to have internal consistency. If they are all measuring the same concept (in this case, perceptions of leadership knowledge and self-readiness to assume leadership), they should correlate with one another (Bland & Altman, 1997). The statistical formula for Cronbach's  $\alpha$  calculates a score by multiplying each item by its weighting coefficient and then calculating the variance. If all the items were identical and perfectly correlated, then the variances would all be equal and the score would be 1. If the items were all independent of one another, the score would be 0. The reported Cronbach's  $\alpha$  of .77-.88 on this instrument indicates strong internal consistency or reliability.

The Likert scale used on the final researcher-designed written evaluation is a commonly accepted way of measuring attitudes. Attitudes have three components:

- (a) affective, which consists of the individual's feelings about an attitude object;
- (b) cognitive, which is the individual's belief or knowledge about an attitude object; and
- (c) behavioral, which is the individual's predisposition to act toward the attitude object in

a particular way (Gall et al., 2007). Participants in this study were asked to rate their attitudes on a number of evaluative items, such as the ease of readability of materials, quality of teaching materials, instructor's effectiveness, the learning environment, and so forth. Participants were asked to select a response from 1 (not well/poor) to 4 (very well/excellent).

The LCSAT asked participants to identify and rate their attitudes and beliefs about leadership and perceived ability of self to lead. The written evaluation asked participants to identify and rate their attitudes and beliefs about how effective they found the teaching-learning process of the intervention sessions. These attitudes and beliefs are highly value-laden personal characteristics. As such, attempts to measure these characteristics have major limitations because such measures rely on the truthfulness and diligence of the individual's self-report (Gall et al., 2007).

Threats to the validity of these measures include the possibility of response set, which is the extent to which an individual's responses reflect a general predisposition, rather than a thoughtful and accurate analysis of each item (Gall et al., 2007). For example, participants in this study may have attempted to select what they thought was the most desired response, rather than their own most truthful response.

### *Qualitative Methodology*

Trustworthiness and confirmability are terms commonly used to express the essence of valid interpretation of qualitative responses, rather than the traditional quantitative focus on validity and reliability. The constructivist paradigm for this line of inquiry implies that the premise of knowledge acquisition and reality is whatever the participants indicated it was to them. The discussion questions were composed and

presented in such a way as to engage the participants so their responses would be open, honest, and insightful. When needed, the researcher sought clarification to gain a thorough understanding of meaning as the respondent intended it. Merriam (1998) debunks traditional quantitative applications of validity and reliability for qualitative inquiry and cites Wolcott (1994, in Merriam) who, instead of validity, “seeks something else, a quality that points more to identifying critical elements and wringing plausible interpretations . . . rather than the correct version, the Truth” (p.201).

To assure that the researcher obtained “plausible interpretations,” all of the respondents who participated in the final audio-taped evaluation session were given a copy of the data analysis to review. They were provided the codes, categories, and themes identified by the researcher and asked to peruse them for accuracy and provide feedback. Just two of the eight attendees at the final evaluation session responded to this solicitation, and both affirmed the researcher’s interpretations. These member checks are one way qualitative researchers can demonstrate sincerity in accurately representing the participants’ perceptions (Merriam, 1998).

Qualitative researchers have developed several strategies to weave throughout a study in order to build trustworthiness and confirmability. Creswell and Miller (2000) posit that the paradigm assumptions of the researcher should guide the decision of which strategies to incorporate; however, the research aims and the participants themselves are influences to consider. The validity procedures outlined by these authors include triangulation, member checking, audit trail, disconfirming evidence, prolonged engagement in the field, thick and rich description, researcher reflexivity, collaboration,

and peer debriefing. A brief description of each based on Creswell and Miller (2000) will follow.

Triangulation is the use of different sources of information to inform categories and themes developed in a study. There are four types of triangulation: across data sources (i.e., participants), theories, methods, and among investigators. In this study, information was sought from multiple participants ( $n = 10$ ), framed on different theories (TFL, educational psychology, and nursing patterns of knowledge) and a mixing of quantitative and qualitative methods. There were not multiple investigators, but the nature of a dissertation study ensures that other seasoned researchers will examine the design, methods, and results.

Disconfirming evidence is the deliberate search of the investigator for evidence that does not support the findings. This is a challenge in practice due to the fact that the researcher's interest is sparked by a hypothesis, belief, or assumption to begin with; there is a natural tendency to see only what is believed or desired, known as the Pygmalion effect (Rosenthal, 2000). Nonetheless, no disconfirming evidence was found in this study.

Researcher reflexivity calls for the researcher to self-disclose the assumptions and biases that underlie his or her beliefs. For the results to be considered trustworthy, the researcher must be aware of and report personal bias that could distort results. The theoretical underpinnings of this study, outlined in the review of the literature, align with the researcher's beliefs that NNM are people who want to learn and are capable of changing their attitudes given circumstances that respect relevant factors such as job stress and role conflict.

Member checking, as mentioned in the data collection procedure, is shifting the search for validity to the participants themselves. It requires that the researcher take the data and interpretations back to the informants and seek feedback. In this study, all participants from the final evaluation session were contacted by email and asked to review the results. Response was low, with only two members replying. Another member checking strategy is to convene a focus group and ask members to share their own responses to the researcher's inductions. The use of a focus group after the conclusion of the project was not considered in this study's design, but may have added confirmability to the results. As discussed in the outline of reliability and validity methods in experimental design, the inclusion of another posttest as well as a focus group weeks or months after the conclusion of the educational intervention would have strengthened the design.

Prolonged engagement in the field over a significant period of time solidifies evidence because such an interval allows the researcher to go down different paths to verify hunches and compare interview data with observations. This study did not allow for this depth of exposure and contact with the participants.

Collaboration is another method that involves engaging with participants from the inception of the study, including development of the research questions, gathering data, and writing the narrative account. This method strives to fully incorporate participant views into the study. Collaboration of this nature was not used in this project.

Thoughtful construction of an audit trail is one way the qualitative researcher strives to build evidence that could be objectively reviewed by another party to verify findings. An audit trail might include journaling, note taking, keeping a research log of

all activities, developing a data collection chronology, and recording data analysis procedures clearly. In this study, the researcher met most of these criteria, but did not keep a formal research log of all activities. While it is possible to construct this documentation after the fact, it would have been more credible to do it from the outset.

Thick, rich description means to present the data in as much detail as possible to give the reader a sense of having actually been in the setting with the participants. It relies heavily on the constructivist perspective to conceptualize the people and sites studied. In this research project, the words of the informants were used wherever possible to illustrate their perceived growth in leadership knowledge, readiness to lead, and effectiveness of the intervention. This allows the reader to “hear” what these NNM said and then draw his or her own conclusions.

Peer debriefing, in this case by the dissertation committee members, is the review of the data and the research process by someone who is familiar with the research. This use of a devil’s advocate helps alleviate the researcher’s bias or tendency to see only that which is expected or desired. It also provides invaluable support to the researcher during the expected trials of conducting a rigorous study.

There are threats to the confirmability of a qualitative study. Participants’ response set, as identified above in relation to the quantitative instruments, applies to the qualitative aspect of this study. Most people wish to be viewed favorably, particularly in front of others. The Hawthorne effect is defined as a form of reactivity and describes a temporary change of behavior or performance, usually for the better, in response to a change in environmental conditions (Merrett, 2006). Early research concluded the response was caused by teamwork when employees saw themselves as part of a study

group or team, but others have expanded the definition to mean that the change follows any new or increased attention given to the research participants.

Participants in this study were part of a study group or team (community of practice formed as a Journal Club) with the opportunity to collaborate with colleagues whom they generally did not know very well. Participants received significant undivided attention from the researcher as well as from their co-workers during the intervention sessions and the final evaluation session. It is possible that their responses and contributions may have been driven by the desire to appear wise or astute, rather than by the intention of communicating genuine expression of true thoughts and beliefs. While this conflict may have been an influencing factor, it is counterintuitive to the conceptual framework of this study to believe that all of the participants' self-reported responses were merely to create a good impression on others.

A recent study confirms the uncertainty facing researchers in trying to understand workplace behavior and professional performance while considering the possibility of a Hawthorne effect. Holden (2008) suggests triangulation, considering a subject from different perspectives, as one strategy to overcome the problem of Hawthorne effects. Rather than using a single research method, such as strict quantitative inquiry alone, the researcher can mitigate this threat to validity of data by using other methods. This study employed multiple venues of data collection (written, verbal, and affective behavior) from both quantitative and qualitative platforms of inquiry to strengthen validity; the reader is advised to consider all influencing factors in interpreting the results.



## CHAPTER IV

### ANALYSIS OF RESULTS

As stated in Chapter I, the serious shortage of nurses and issues of nursing retention prompted the need to seek definitive solutions. The purpose of this research study was to determine if an educational intervention to develop characteristics of transformational leadership (TFL) in NNM made a difference in participants' perceptions of knowledge of TFL and their ability to lead. This chapter will present the results of the educational intervention.

The chapter is organized in terms of the two platforms of inquiry used: quantitative and qualitative, with the statistical analysis of *The Leadership Characteristics and Skills Assessment Tool* (LCSAT) presented first, followed by quantitative results of the written evaluations, and then by the qualitative data. All three of the research questions will be considered in each platform of inquiry. The research questions explored in this experiment were as follows.

Q1 Does an educational intervention of a Journal Club (a meeting of NNM to critically discuss research and literature related to transformational leadership) increase NNM perceived knowledge of characteristics of transformational leadership?

Q2 Does an educational intervention of a Journal Club increase NNM perceived ability of self to lead?

Q3 How do NNM describe the effect of the intervention on their leadership knowledge and ability?

## Quantitative Results

### *Results of LCSAT*

The plan of this study was a two-group design employing repeated measures of a pretest and posttest over time to NNM with random assignment to either a control or an experimental treatment group. The independent variable was the educational intervention of leadership development in the form of a Journal Club and the dependent variables were the participants' perceived knowledge of the characteristics of TFL and perceived ability of self to lead. In this chapter, for ease of reading, the two dependent variables will be shortened to "knowledge" and "ability".

To provide context for the participants' scores, the interpretation of Grossman & Valiga's (2005, p. 22) LCSAT scores is presented in Table 3.

Table 3

#### *Interpretation of LCSAT Scores*

| Interpretation of LCSAT Scores                 |   |
|--|---|
| Part 1: Perception of What Makes a Good Leader |   |
| 39 or less                                     | Need to do some reading on what good leadership is                    |
| 40-49  | Definitely mixing up the difference between management and leadership |
| 50-59  | Probably mixing up the difference between management and leadership   |
| 60-69  | Good perception of a good leader                                      |
| 70-80  | Excellent perception of a good leader                                 |
| Part 2: Perception of Your Own Ability to Lead |   |
| 39 or less                                     | Extremely low perceived leadership ability                            |
| 40-49  | Low perceived leadership ability                                      |
| 50-59  | Moderate perceived leadership ability                                 |
| 60-69  | High perceived leadership ability                                     |
| 70-80  | Extremely high perceived leadership ability                           |

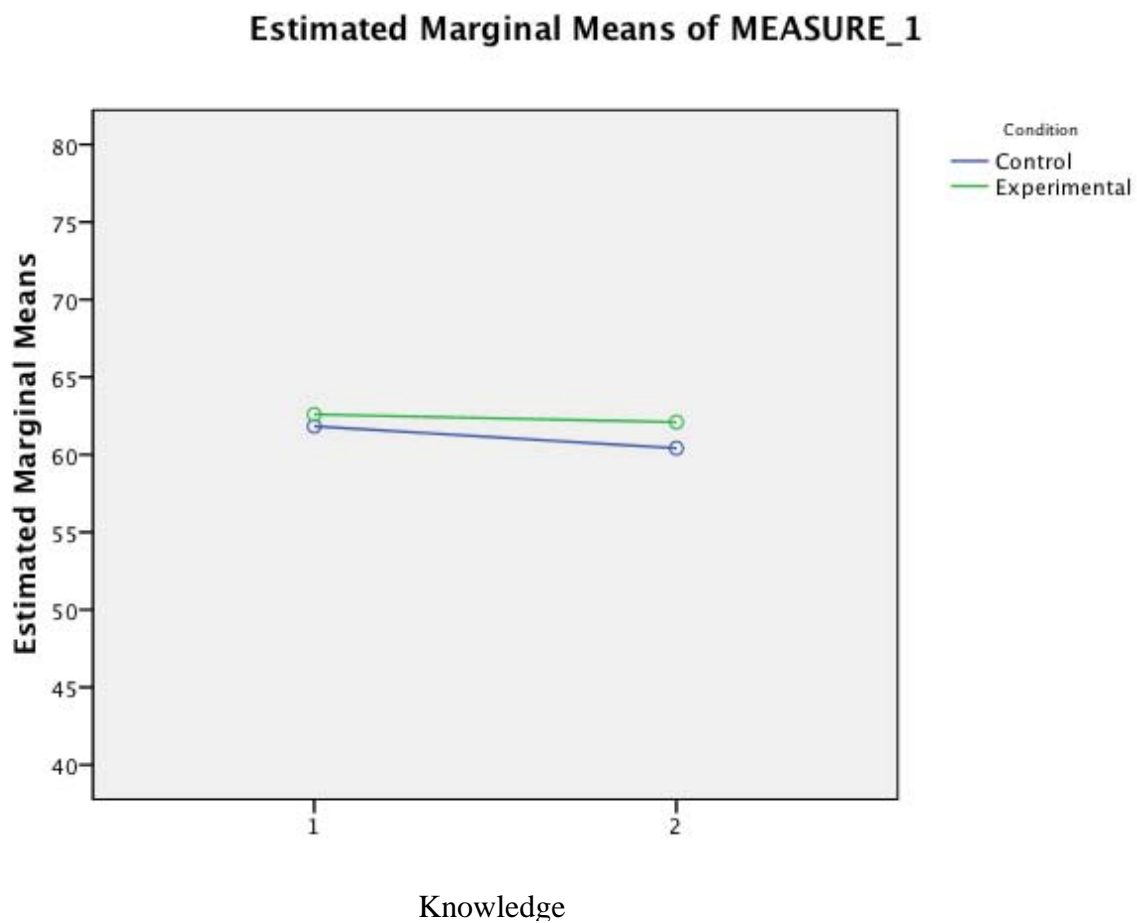
Table 4 lists the actual LCSAT scores obtained from this sample. The total possible range of scores for each of the two parts of the LCSAT falls between a low of “39 or less” to a high of 80 (Grossman & Valiga, 2005, p. 22). The range from lowest likely (40) to highest possible (80) is represented by the y axis (40-80) of Figures 4 and 5. For the variable of knowledge (LCSAT Part 1), the bulk of respondents in both the control and experimental groups scored in the 50-59 range (“probably mixing up the difference between management and leadership”) and the 60-69 range (“good perception of a good leader”). For the variable of ability, most of the scores for Part 2 of the LCSAT fell in the same ranges: 50-59 (“moderate perceived leadership ability”) and 60-69 (“high perceived leadership ability”).

Table 4

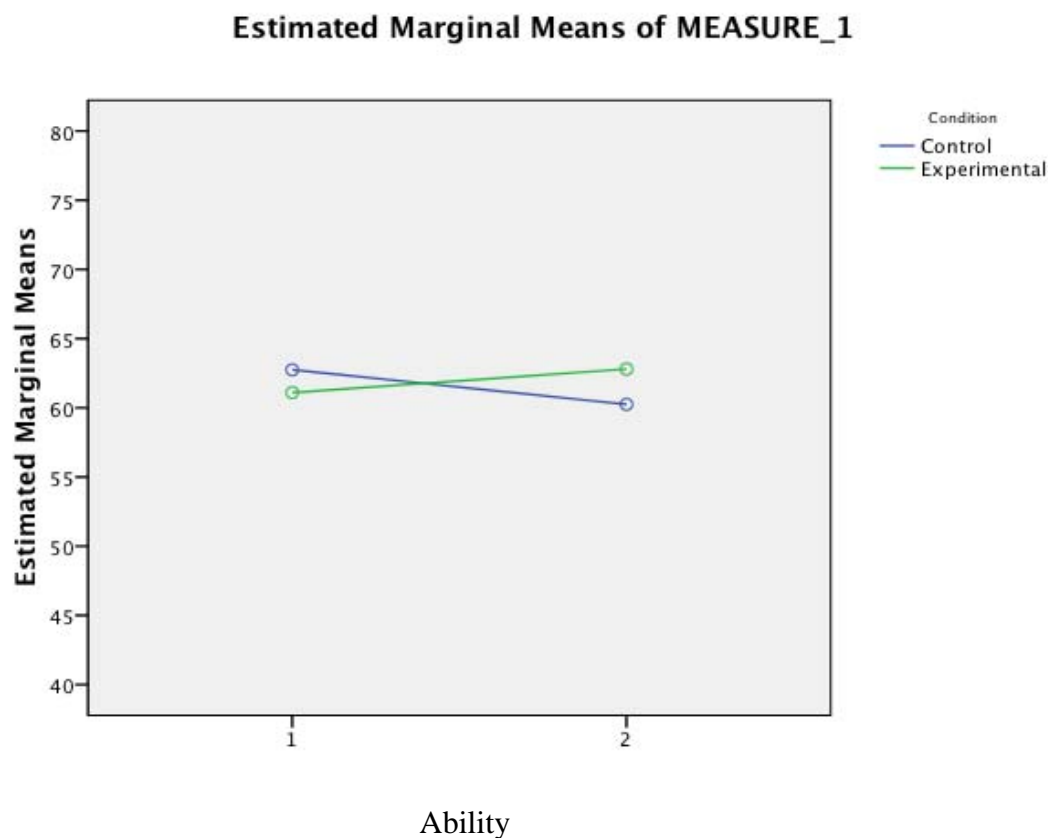
*LCSAT Scores*

| Repeated Measures    | Control | Experimental | Total |
|----------------------|---------|--------------|-------|
| Pre LCSAT Knowledge  |         |              |       |
| M                    | 61.83   | 62.60        | 62.18 |
| N                    | 12      | 10           | 22    |
| SD                   | 5.25    | 6.05         | 5.77  |
| Post LCSAT Knowledge |         |              |       |
| M                    | 60.42   | 62.10        | 61.18 |
| N                    | 12      | 10           | 22    |
| SD                   | 4.21    | 6.05         | 5.07  |
| Pre LCSAT Ability    |         |              |       |
| M                    | 62.75   | 61.10        | 62.00 |
| N                    | 12      | 10           | 22    |
| SD                   | 6.96    | 6.45         | 6.63  |
| Post LCSAT Ability   |         |              |       |
| M                    | 60.25   | 62.80        | 61.41 |
| N                    | 12      | 10           | 22    |
| SD                   | 8.96    | 5.03         | 7.39  |

Key: M = mean; N = sample size; SD = standard deviation



*Figure 4.* Trending of LCSAT Part 1 (knowledge) mean scores between control and experimental groups from pretest to posttest.



*Figure 5.* Trending of LCSAT Part 2 mean scores (ability) between control and experimental groups from pretest to posttest.

To answer the first two research questions, an analysis of variance (ANOVA) for repeated measures was run using Statistical Package for the Social Sciences (SPSS) version 16.0 for Mac. ANOVA is an inferential statistical method used when measuring the differences among group means. This analysis is done when investigating the effect of a categorical independent variable (educational intervention) on continuous dependent variables (knowledge and ability) (Gall et al., 2007). The LCSAT measurements of knowledge and ability are continuous variables, a term defined as a measurement that

could theoretically take on any value on a continuum within a certain range (Glass & Hopkins, 1996).

Repeated measures ANOVA is an approach that helps correct for individual differences, either among the subjects or within the same subjects over time. For example, an individual's score could vary from pretest to posttest based on personal state (hunger, fatigue), environmental factors (noise, temperature), or response style (hesitant to score any extreme value) at the different times of testing (Munro, 2001). Repeated measures ANOVA determines whether the pretest-posttest difference for the experimental treatment group is truly different from the pretest-posttest difference for the control group (Gall et al., 2007). This approach reduces the error variance in the outcome measure and allows for the ability to measure group differences after considering other differences between subjects.

To ensure valid interpretation of ANOVA results, three assumptions must be met: (a) the groups must be mutually exclusive; (b) variances of the groups should be equivalent (homogeneity of variance); and (c) the dependent variable must be normally distributed. All three of these criteria were met in this study; the control and experimental groups were mutually exclusive, variances were equivalent, and the dependent variables were normally distributed.

For valid interpretation of repeated measures ANOVA, there are additional criteria. In simple ANOVA, the measured observations are independent of each other because the participants are randomly assigned to mutually exclusive groups. In repeated measures, however, there is correlation between the measures because they are from the

same people. Therefore, a further assumption of compound symmetry must be met (Munro, 2001).

The two parts to this assumption of compound symmetry are: (a) correlations across the measurements are the same, and (b) the variances should be equal across measurements. Statistical analysis of the data in this study verified that these assumptions were met.

For the main effect over time, there were no statistically significant differences detected, meaning that, on average, subjects did not demonstrate a change of performance in knowledge ( $F(1,20) = .375, p = .55$ ) or ability ( $F(1,20) = .158, p = .67$ ) from pretest to posttest. The time x condition variable of knowledge did not demonstrate a change ( $F(1,20) = .086, p = .77$ ) (Figure 4). However, the time x condition interaction for the ability variable was statistically significant with the scores of the experimental group higher than the scores of the control group ( $F(1,20) = 4.363, p = .05$ ) (Figure 5). For the variable of knowledge, it was noted that the experimental treatment group did show trending in the predicted direction, with a slight increase from pretest to posttest, while the control group showed a slight decrease.

Next, the quantitative results of the final written evaluations will be presented to augment information from the statistical analysis as it provides answers to the research questions; did the educational intervention improve NNM perceptions of knowledge of characteristics of TFL and ability of self to lead? Additionally, the final written evaluations were examined to reveal participants' perceptions of the effectiveness of the educational intervention.



### *Results of Final Written Evaluations*

The experimental group consisted of a total of 10 participants; 9 submitted written evaluation forms for a 90% response rate. The written evaluation forms were anonymous and it was not known why one participant did not return the form. Responses on the written evaluation forms were tabulated and simple percentages were calculated (see Table 5).

Table 5

#### *Quantitative Results of Final Written Evaluations*

| Evaluation Topic  | Rating “Very Well/Excellent” | Rating “Well/Good” | Rating “Average/Fair” | Rating “Not Well/Poor” |
|---|------------------------------|--------------------|-----------------------|------------------------|
| Met objectives  | 3/ 33.3%                     | 6/66.6%            | ---                   | ---                    |
| Learning methods were effective   | 4/44.4%                      | 5/55.5%            | ---                   | ---                    |
| Materials easy to read  | 4/44.4%                      | 4/44.4%            | 1/11.1%               | ---                    |
| Quality of nursing literature & handouts                                    | 4/44.4%                      | 5/55.5%            | ---                   | ---                    |
| Easy to ask questions/get help  | 7/77.7%                      | 2/22.2%            | ---                   | ---                    |
| Environment was conducive to learning                                       | 5/55.5%                      | 4/44.4%            | ---                   | ---                    |
| Instructor’s teaching methods were effective                                | 5/55.5%                      | 4/44.4%            | ---                   | ---                    |
| Program met my goal for increased support in developing my mentoring skills | 5/55.5%                      | 3/33.3%            | 1/11.1%               | ---                    |

Overall quantitative responses on the written final evaluation form were very positive. All of the respondents indicated that the educational intervention met objectives, and that the learning methods were effective (Research Q3). The quality and readability of the handouts were rated as “very well/excellent” or “well/good” by all respondents, except one who indicated “average/fair” for readability. The highest number of “very well/excellent” responses was for the item “easy to ask questions/get help.” Responses were relatively evenly split between “very well/excellent” or “well/good” for rating the items of learning environment and instructor’s teaching methods. All but one indicated a “very well/excellent” or “well/good” response for the program’s ability to meet the goal of support in developing mentoring skills; one respondent indicated “average/fair” for this item. Two different participants provided the two lowest responses of “average/fair.”

Participants’ spoken comments throughout the intervention sessions indicated that more than one individual found the reading material, particularly the research articles, to be challenging, but only one written response indicated this. The strongest positive response was for the item “easy to ask questions/get help,” with 77% rating this as “very well/excellent.” This strong positive response indicates that participants felt comfortable in seeking clarification or getting help to further their learning within the context of this instructional format.

Quantitative responses on the final written evaluation form indicated a positive direction in increased knowledge (Research Q1), despite the statistical analysis that the educational intervention did not make a statistically significant difference. However, the information garnered from the final written evaluation form is congruent with the positive trending in the predicted direction for increased knowledge, as illustrated in Figure 4.

The evaluation responses also indicated that the educational intervention was perceived as an effective learning format for these participants to increase their perceived ability to lead (Research Q2), particularly in the area of mentoring relationships. The overall positive quantitative written evaluation responses bolster the conclusion that the theoretical framework for the educational intervention of educational psychology concepts and patterns of nursing knowledge were conducive to knowledge development in this sample of NNM.

### Qualitative Results

Qualitative data were derived from both the post-intervention written evaluation forms and final evaluation session. Results from the written evaluation forms will be presented first, followed by results from the audio-taped final session.

Analysis of qualitative data is done by a sorting and coding process. This process consists of assigning code designation to various aspects of the data so data can be compiled and common themes matched, while still being able to identify the data source (Merriam, 1998). There are two levels--identifying information about the data and interpretive constructs related to the data. Responses from all participants were sorted and coded for repeating words, theme, or ideas. The next level of analysis is construction of categories or themes that contain the essence of the data. These categories or themes are concepts indicated by the data, but not necessarily implicit in the data itself (Merriam, 1998). Devising the categories is largely an intuitive process; it is systematic, but influenced by the study's purpose and the researcher's orientation and knowledge, as well as perceptions of what concerns the participants were trying to communicate.

As mentioned in Chapter III, participants in the intervention group engaged in icebreaker activities at the outset of the first two sessions. One aspect of the first activity asked each participant to spontaneously call out the one most important leadership characteristic that came to mind. The characteristics named were: honesty, integrity, creativity, fairness, good communication, “if you say it, mean it”, open-door policy, open to change, and two-way respect (Table 6). This list of what the participants themselves had identified as important leadership traits was on the table at every session and used as a frequent reference in discussion. The list also served as a springboard from which prior knowledge could be reinforced while new knowledge was introduced.

Table 6

*Leadership Characteristics Identified by Participants*

| Leadership Characteristics Identified in First Icebreaker, Listed in the Order Stated |                          |
|---|--------------------------|
| Group 1   | Group 2                  |
| Honesty   | Communication            |
| Creativity  | If you say it, mean it   |
| Integrity   | Respect, going both ways |
| Fairness  | Open door policy         |
| Good communication  | Open to change           |

*Results of Final Written Comments*

As previously stated, 9 of a total of 10 experimental group participants anonymously submitted written evaluation forms for a 90% overall response rate. One evaluation form included only circled items on the Likert scale, but provided no written

responses, so response return for written qualitative feedback was 80%. Responses were reviewed for repetitive codes and themes and are reported in Table 7.

Table 7

*Written Qualitative Responses*

| Open-ended Statement                                     | Code  | Theme  | N |
|--|---|--|---|
| Liked most   | Discussion (4)<br>Small group (3)<br>Open dialogue (3)<br>Peer support (2)<br>Constructive comments/examples (1)<br>Instructor knowledgeable and fun (1)  | Small group format facilitated open dialogue<br>Participants valued peer feedback and support  | 8 |
| Liked least  | Time/scheduling time (3)<br>Reading “dry” (1)<br>Favoritism to certain people/experiences (1)<br>Others’ low attendance (1)   | Challenges to learning experience<br>• Time<br>• Difficulty of materials<br>• Feeling left out<br>• Absence of others diminished quality of discussion | 6 |
| One thing that could help to develop personal leadership | Practice/confidence (4)<br>More classes (3)<br>Support from other team members in leadership roles (2)  | Opportunity to practice in leadership role<br>Further education<br>Ongoing support/mentoring   | 8 |
| Additional Comments                                      | More reinforcement of ideas/direction from leader instead of having peers respond (2)<br>Wish we could have met without constraints of working (1)<br>Wish it lasted longer (1)<br>Good, thought-provoking (1)<br>More advance notice (1) | Desire to have time/duty constraints acknowledged<br>Journal Club format valued while still somewhat stressful   | 6 |

Key: Numbers in parentheses indicate number of responses that included these code words.

These written qualitative responses indicate that participants particularly valued the elements of small-group format, open dialogue, discussion, and peer support; all are integral concepts of the community of practice format of the Journal Club. While the small group size was helpful to some, one member expressed desire for others in the group to attend more regularly. This sentiment was expressed in the second pilot study, as well.

Two written responses directly expressed the wish that the researcher would have taken more of a lead in discussion, rather than just act as a facilitator. This was also brought out in the audio transcript, which will be discussed further below.

In considering Research Q1, the comments of participants about what they liked the most indicated that they felt the educational intervention was appreciated for increasing their knowledge. As for Research Q2, there was no specific response that indicates participants perceived an improvement in their ability to lead; however, half the respondents stated they needed more practice and confidence to develop their leadership. This response will be explored more fully below in the context of the final evaluations session. Research Q3 asked how the NNM described the effectiveness of the intervention on their leadership knowledge and ability. This was evidenced by the responses noted in Table 6, particularly that participants “liked most” the discussion, small-group format, open dialogue, and peer support.

#### *Results of Final Audio-Taped Evaluation Session*

Eight participants (80% participation rate) attended the final evaluation session. This session was offered as optional, but attendance was highly encouraged. Research participants were told that whether they attended or not, their individual LCSAT scores

would be sent to them. However, for participants to have an opportunity to discuss and understand their personal scores, attendance at this session was recommended.

The session was audio-taped in its entirety, and the researcher reminded participants that the tape would be transcribed, but that no identifying information would be retained. Participants gave no indication that they were uncomfortable being recorded; in fact, the mood of this session was very light and jovial. Participants were given their LCSAT pretest and posttest scores with the key provided by the authors (Grossman & Valiga, 2005) (Table 3). Participants were first asked what their thoughts were on the scores and if they had any questions. To gather more information to answer Research Q3, participants were also encouraged to discuss their thoughts, perceptions, and feelings on the effectiveness of the educational experience as a whole.

The data were then reviewed considering the research questions, specifically the two dependent variables of leadership knowledge and ability. Responses were analyzed for evidence of participants' leadership knowledge and ability, then for their perceptions of the effectiveness of the educational intervention as a process for developing further knowledge. Consistent with the hallmark features of qualitative inquiry, data analysis revealed other important themes, as well (Table 8).

Table 8

*Results of Final Audio-Taped Evaluation Session*

| Category  | Theme   | Number of Times<br>Category Element<br>Surfaced |
|---|---|---|
| Perceived Knowledge of<br>Characteristics of<br>Leadership (RQ 1:<br>knowledge)   | Concern over score decreasing<br>from pre-to post-test      | 22  |
|   | Did not know what I thought I<br>knew                       |   |
|   | Evolving ideas on leadership                                |   |
| Perceived Ability of Self to<br>Lead (RQ 2: ability)  | Considering challenging the<br>status quo                   | 17  |
|   | Vision  |   |
|   | Risk-taking   |   |
| Need for Ongoing Practice/<br>Mentoring (RQ 2: ability)   | Ongoing commitment to learning                              | 7   |
|   | Desired support for development<br>of interpersonal skills  |   |
| Process of Knowledge<br>Development (RQ 3:<br>effectiveness of educational<br>intervention)   | Change in attitude  | 18  |
|   | Need for time in role                                       |   |
|   | Need/desire for reflection time                             |   |
| Organizational Elements:<br>• Support<br>• Barriers<br>• Continuing education<br>(RQ 3: effectiveness of<br>educational intervention) | Organizational culture                                      | 12  |
|   | Time constraints  |   |
|   | Relevance to online learning in<br>formal academic programs |   |

As with the sample in the second pilot study, some of the NNM in this group who had the most years of nursing experience actually scored lower on the LCSAT posttest Part 1 (knowledge) than they had on the pretest. This created some initial discomfort, but



as the participants explored this phenomena with each other, they were able to reconcile the decreased score with the explanation that “What you thought you knew . . . maybe you didn’t” (Veronica [all names are pseudonyms], p. 2).

The desire for the researcher to take a more active role in providing answers surfaced in the final audio-taped evaluation session, as it had in the final written evaluation comment section. When participants wondered out loud why their scores decreased from pretest to posttest, the researcher asked the group why they thought that was so. Despite indicating that they wanted the researcher to explain why some of their scores had decreased, with prompting and encouragement, these informants were able to draw their own conclusions. This was a more desirable outcome that is congruent with the constructivist approach to knowledge building. The group was informed that some learners in the pilot study experienced the same decrease in scores and expressed the same dismay. This seemed to give them the confidence they needed to speculate out loud. One participant stated, “After all that, I guess I thought I was more ready than I am. And I really don’t feel like I feel that way. I feel like I’ve broadened my thought process on what leadership is and how I might attain better results” (Veronica, p. 2). This comment demonstrated participants’ reactions to lower LCSAT scores on knowledge and their concern over “losing knowledge.”

### *Research Question 1*

Research Q1 asked if an educational intervention of a Journal Club increased NNM perceived knowledge of characteristics of TFL. While some scores dropped, participants’ comments reflected growth in understanding of the components of TFL. The following comment illustrates knowledge gain in credibility (the idealized influence

component of TFL): “It’s how people perceive you . . . if they perceive you as a leader, you are a leader to somebody, you don’t need the nametag” (Maria, p. 11).

Another NNM brought up a recent disagreement with a staff nurse with whom she had struggled and related how she had sought guidance from one of the other research participants in conflict management (the intellectual stimulation component of TFL) with a successful outcome: “I avoid conflict sometimes at all costs so sometimes my communication skills are . . . I need practice with how to, you know, deal with it appropriately and professionally . . . and I’m not there yet” (Alice, p. 5).

By the end of the evaluation session, participants verbalized understanding core concepts of TFL. One individual exemplified vision (the inspirational motivation component of TFL) by stating: “I think a manager is the person who says, we’ve always done it this way and we’re gonna keep doing it this way. And a leader says, we’ve always done it this way, but you know what? There may be a better way!” (Ellen, p. 14). Another participant illustrated credibility (idealized influence) in this comment: “Just because someone is in a management or leadership role . . . like a clinical team leader, that doesn’t mean you’re going to be respected as a leader” (Susan, p. 11).

### *Research Question 2*

Research Q2 asked if the educational intervention of a Journal Club increased NNM perceived ability of self to lead. Further reflection and discussion within the group revealed evolving awareness and a cautious acceptance of emergent ability as a leader. New relationships formed in the community of practice were mentioned as an expansion of resources and mentoring possibilities, as illustrated by the statement, “This was so

good for me. I am still so new in my role and I really needed the help to get where I could be a leader” (Tammy, p. 15).

Qualitative results from the final written evaluation form indicated that some participants desired more “practice” and “confidence” to increase their leadership ability. The capacity to identify what is needed to develop leadership ability and possible avenues for meeting those needs indicates growth in self-knowledge. By verbalizing how they might find opportunities for leadership practice and confidence building in the leadership role, informants supported the quantitative results of the LCSAT Part 2, indicating growth in readiness to lead. This informant illustrated readiness to lead through creativity (intellectual stimulation) and empowerment (individualized consideration) in her musings:

I’m just thinking . . . you could work with [the manager . . . and have] that information made into some kind of a notebook. I know I’m making it sound like some kind of an educational process, but I mean that’s how you do it. You have to check in with that person . . . to give them the information and the guidance and say, how are you doing and how are you feeling about this? . . . like we do with any other person who changes roles. (Hillary, p. 11-12)

Participants in this group also expressed appreciation for the differing values and experiences of peers with whom they had not met or worked until the intervention sessions: “Coming into a group where I don’t work with these people . . . we’re on different levels, we’re in different departments . . . it’s just really nice to get the variety, get the different viewpoints from the variety of nursing in the same hospital” (Maria, p. 5). In addition to knowledge gained on leadership, these informants indicated they may have developed more ability to take on a leadership role as evidenced by identifying resources for pursuing further learning: “This gives us some good resources and ideas to

go and do a literature search and do more reading about how people attain skills and how do they do it, how do they develop leadership and what works for them” (Veronica, p. 3).

Another participant indicated ability to lead by risk taking (inspirational motivation): “Everybody says, we’ve always done it this way, we can’t change it! And we can. And it will change. And you can grow from it” (Ellen, p. 15). There were also expressions of validation for the effectiveness of the educational intervention in increasing knowledge: “Online learning is not the same as sitting around a table like this talking. Talking about . . . [discussion topics] it’s just not the same and so I feel like I’ve learned more doing this [Journal Club] than sitting through an entire MBA class” (Veronica, p. 3).

These examples underscore the belief that participants may have felt that new ideas and relationships could encourage them to tackle leadership challenges and interpersonal conflicts that had heretofore seemed too daunting. There was an allusion to the possibility that new strategies might be successfully ventured in day-to-day experiences and challenges.

In summary, results of the data analysis in this study revealed that perception of knowledge of the characteristics of TFL increased in the experimental group. This was evidenced in the quantitative and qualitative final written evaluations and the final audio-taped evaluation session. This growth in knowledge of TFL was not detected in the repeated measures ANOVA of the LCSAT scores. However, growth in perceived readiness to lead was evidenced in quantitative and qualitative final written evaluations, the final audio-taped evaluation session, and the repeated measures ANOVA of the

LCSAT scores. Participants indicated through the final written evaluations and the audio-taped final evaluation session that they found the educational intervention effective. Further conclusions and recommendation will be explored in the final chapter.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Overview

This final chapter restates the research problem and research questions generated from the literature review. The major methodologies used will be summarized as well as the steps taken to ensure internal and external validity of the quantitative methods in addition to the confirmability and trustworthiness of the qualitative methods. The results will be summarized and conclusions drawn, based not only on this researcher's findings, but also in relation to critical elements of the literature review. The success of the educational intervention as a means to develop characteristics of transformational leadership (TFL) in novice nurse managers and administrators (NNM) will be discussed, and recommendations for further inquiry will be posed.

The problem addressed in this dissertation was retention of nurses during a time of an unprecedented shortage in the profession, particularly in rural areas. Linked to this crisis is an urgent need for decisive and effective leadership. Review of the literature supported TFL as an excellent model for empowering nurses (Force, 2005; Sofarelli & Brown, 1998; Welford, 2002) and spurring organizational change (Avolio, 2004; Mavrinac, 2005; Salt & Profetto-McGrath, 2008). Furthermore, TFL has been embraced as foundational to the Magnet Recognition Program (American Nurses Credentialing

Center, 2008) which is shaping the quest of many hospitals for improved patient outcomes and nursing retention programs.

However, it was identified that nursing research was lacking in determining how TFL theory could be developed for nursing leadership and, specifically, how characteristics of TFL can be fostered in NNM. This study proposed to investigate the effectiveness of an educational intervention based on principles of educational psychology and invoking nursing's unique ways of knowing (Carper, 1978, 2004). The research questions were:

Q1 Does an educational intervention of a Journal Club (a meeting of NNM to critically discuss research and literature related to transformational leadership) increase NNM perceived knowledge of characteristics of transformational leadership?

Q2 Does an educational intervention of a Journal Club increase NNM perceived ability of self to lead?

Q3 How do NNM describe the effect of the intervention on their leadership knowledge and ability?

### Methods and Results

Both quantitative and qualitative methods of inquiry were employed to seek answers to the research questions. This was done to try to extrapolate as much data as possible; because of the turbulent environment in today's healthcare settings (Havens et al., 2008; Tillman et al., 1997) and hospitals, in particular, NNM are a challenging sample population to study. True experimental designs with personnel in hospital settings are thwarted by urgent, competing demands on the time and attention of the NNM, with the result of significant attrition from the research sample. It was hoped that by adding a rich, qualitative dimension to this experimental study, greater depth of information could be discovered to answer the research questions.

In brief, the research findings were that there were no statistically significant differences detected; on average, subjects did not demonstrate a change of performance in knowledge ( $F(1,20) = .375, p = .55$ ) or ability ( $F(1,20) = .158, p = .67$ ) from pretest to posttest. The time x condition variable of knowledge did not demonstrate a change ( $F(1,20) = .086, p = .77$ ). However, the time x condition interaction for the ability variable was statistically significant with the scores of the NNM in the experimental group higher than the scores of those in the control group ( $F(1,20) = 4.363, p = .05$ ).

Perception of knowledge of TFL characteristics did not change overall within or between groups. Qualitative results demonstrated that participants in the experimental group increased their perception of knowledge of the characteristics of leadership, despite the lack of statistically significant quantitative findings and despite the fact that some individuals actually scored lower on *The Leadership Characteristics and Skills Assessment Test* (LCSAT). Qualitative results also indicated that the informants perceived an increase in their readiness to lead. Participants in the experimental group affirmed that they found the intervention effective in developing their leadership knowledge and ability. However, interpretation of these results must be coupled with a thorough understanding of the design and limitations of the experiment. The first section of this chapter will discuss the internal and external validity of the experimental research design. Then, confirmability and trustworthiness of the qualitative data will be discussed.

#### Evaluation of Quantitative Results

There are multiple factors to consider in assessing the internal and external validity of an experiment. The following discussion is based upon the thorough review of these factors from Gall et al. (2007). Internal validity of an experiment is the extent to



which extraneous variables have been controlled by the researcher. External validity is the extent to which the findings of an experiment can be generalized to individuals and settings beyond those which were studied. Threats to internal validity will be considered first, followed by discussion of threats to external validity.

### *Threats to Internal Validity of*

#### *Experimental Design*

The design of this experiment employed repeated measures over approximately 6 weeks duration. History is a potential threat since participants could have been exposed to other factors that influenced their beliefs and knowledge about leadership and facets of TFL and, thus, affected their responses. The research setting was a Magnet-aspiring organization, and it was possible that other reading or knowledge-evoking materials were available or that additional thought-provoking interactions occurred. However, if this were so, it would be unwise and impractical to expect participants to avoid these opportunities.

Testing is another extraneous variable that may have been a threat to this study. The pre-and post-measures were identical; the same instrument (LCSAT) was administered to all participants in both the intervention and control groups. It is possible that participants could have “improved” their scores because of recognition of the instrument items; socially desirable response bias could have influenced which response was selected. In the present study, there was no reason to have expected this bias to be more pronounced for either group since the groups were more or less equivalent.

Statistical regression is a possibility whenever a pretest-posttest procedure is used to assess change (Gall et al., 2007). This is the tendency for research participants whose

scores fell at either extreme of a measure to score closer to the mean when the test is repeated. The results of this study did not demonstrate this effect.

Gall et al. (2007) state that in experimental designs in which a control group is used, the treatment effect can be confounded by differential selection of participants to the control and experimental groups. However, careful adherence to random assignment of participants is the best safeguard against this threat. In this study, several participants expressed a strong desire to self-select into either the control group (one employee knew she had upcoming vacation time) or experimental group (most indicated a preference to participate in the Journal Club), but the results of the coin toss were binding.

Experimental mortality was the most significant threat to this study; in fact, experimental mortality is listed as the only definite weakness in this specific design (Gall et al., 2007). Attrition can result from illness, participant resentment about which group he or she is assigned to, or the perception that the intervention is too demanding or threatening. It is a particularly strong threat when attrition causes differential loss of participants across the groups. For example, in this study the intervention group was subdivided into two groups of six and seven each. If a total of four people withdrew from the intervention group, and they were all from the group with six participants, that would have substantially impacted the effectiveness of that group by reducing the size of the group to just two members. In fact, one individual randomly assigned to the experimental group was called to jury duty for the first 2 weeks of the intervention sessions and withdrew. The individual with the planned vacation was assigned to the intervention group, attended the first session, and then did not return, as did another individual in the experimental group. These are the human factors that challenge the researcher conducting

an experiment in a busy and unpredictable real-life environment. They can only be acknowledged, not perfectly controlled. The researcher made an effort from the outset of this project to solicit an adequate sample, realizing from past experience that some participants would not complete the study.

Experimental treatment diffusion was another practical consideration in this study. The internal validity of a study is threatened when control group participants perceive the experimental treatment as desirable and, if members of the control group, then attempt to gain access to the treatment. To control for this, individuals assigned to the control group were informed at the outset that at a later date, provided the hospital administrators agreed, the experimental treatment would be made available to anyone desiring it. Participants in the experimental group were instructed not to share the reading materials or discuss the leadership development sessions with anyone else. Experimental treatment diffusion is particularly likely if control and experimental group participants are in close proximity to one another during the period of the experiment. Since most of the participants did not know one another very well and worked different shifts and in different areas of the hospital, this was not as likely as if all the participants had been drawn from one unit. However, it is acknowledged that despite efforts to control the experimental treatment effect and no evidence was found that it did occur, experimental treatment may have diffused to the control group.

Compensatory rivalry by the control group can occur if the individuals in the control group think they are in competition with the experimental group and then attempt to outperform them with extra effort or motivation to score “better.” All participants were given the same verbal and written instructions on how to complete the LCSAT.

Participants were not informed which group they were assigned to until after they had completed the pretest. Once assigned, control group members were told they could participate in the intervention at a later date if they wished. There was no evidence that compensatory rivalry was a factor in this study.

Compensatory equalization of treatments can become a factor if the experimental treatment condition is perceived as desirable and administrators attempt to compensate the control group for having been denied the opportunity for leadership development by providing that or some other extra educational benefit. Again, this was controlled for by explaining to the administrators the need to keep all conditions the same by conducting “business as usual” and by assuring hospital administrators that the intervention would be made available again without cost at a later date. There was no evidence that the control group was provided anything different or extra than what any other hospital employee received in the timeframe of the study’s duration.

Resentful demoralization of the control group can be an issue if control group participants become discouraged, believing they have been excluded from a valuable opportunity that their colleagues in the experimental group received. As a result, they could have responded carelessly or with deliberate disinterest on the posttest. This was minimized by reassurance from the outset that anyone who desired to participate would be afforded the opportunity at a later date.

#### *Threats to External Validity of Experimental Design*

The main threat to external validity of an experiment is over-generalizing the results from the experimentally accessible population (NNM from one Magnet-aspiring medical center in a rural mountain west state who consented to participate) to the entire

target population of interest (all NNM). Factors such as education, economics, rurality, and culture must all be considered. Gall et al., (2007) divide consideration of external validity into two subcategories: population validity and ecological validity. Population validity will be discussed first, then ecological validity.

### *Population Validity*

The temptation to draw unwarranted conclusions by over-generalizing one's findings threatens the credibility of the researcher. This study's sample size ( $n = 22$ ) may have been too small and limited in scope to generalize much beyond the research setting. However, the experimental design of random assignment to two mutually exclusive groups ensured the best strategy to overcome this threat. In this case, random assignment resulted in homogeneity of groups, strengthened the validity of the data, and shed new light on research questions involving leadership development in NNM.

Personological variables, defined by Gall et al. (2007) as learner ability, extraversion-introversion, and anxiety levels, are all factors that may affect the generalizability of an experiment. Participants in this study did exhibit these personological variables: some individuals were very talkative, while others needed to be drawn out; some stated the reading was easy for them, and others indicated it was more difficult; and some participants became anxious and emotional when discussing certain topics, while others remained relaxed and calm. To overcome this threat, the researcher encouraged the quieter individuals to share their thoughts so that all members would have an opportunity to be heard. For those who indicated the reading was challenging, the researcher steered the dialogue to one of the lighter pieces of literature. Emotionality was responded to with respect by all members of the group, and the researcher made a point

of acknowledging or validating any of these personal disclosures. Participants were reminded that the Journal Club community of practice was a safe haven for learning and sharing; confidentiality of discussions was reinforced. All of these personological variables and considerations needed to be taken into account when interpreting the results of this study.

### *Ecological Validity*

Explicit description of the experimental treatment can be a threat to the design if the researcher lays out a too-detailed explanation of the planned intervention. Yet, the participants must be able to give informed consent with appropriate knowledge of what will be expected of them. The researcher attempted to strike a balance in giving the potential participants a fair assessment of what agreeing to join the Journal Club would involve without expressly stating the details of the methodology and anticipated outcomes.

The Hawthorne effect could have been a significant threat to the design of this study. As was extensively discussed in Chapter III, one of the safeguards against invalidating research findings because of the Hawthorne effect is to triangulate the research design. Both quantitative and qualitative methods were included to reduce this effect. Additionally, to minimize the perception that special attention was being given to the participants, the researcher made every effort to have members of the Journal Club ask and answer questions of themselves and each other, rather than seek quick and easy information from the researcher.

Experimenter effect comes into play as a threat when the measured effects are purely due to some trait of the researcher, or if the researcher's expectations are

communicated, however unintentionally, to the participants. By trying to maintain a low profile as a facilitator, rather than as a traditional animated presenter or educator, the researcher attempted to minimize this effect. Participants often made sociable inquiries about the researcher's educational program and its requirements or wondered about the process of doctoral education and the dissertation research project. This threat was countered by establishing rapport with the participants by meeting them in their domain. The theoretical premise of situated cognition and community of practice not only provided the learning context, but also acknowledged that for these NNM, the professional milieu of the hospital setting was their comfort zone. In some of these conversations, it was a challenge to the researcher to try to remain neutral and objective without appearing unfriendly or aloof, but every effort was made to keep the focus on the participants and the educational intervention program's outcome goals. Experimenter effect may have been a factor when one participant noted on the final written evaluation form that what she liked least about the educational intervention was "favoritism to certain people/experiences"; at least this one person perceived a lack of experimenter objectivity.

Pretest sensitization could occur if the pretest itself (in this case the LCSAT) reacted with the experimental treatment (educational intervention) and affected the results. It is possible--in fact, probable--that the items on the LCSAT alerted participants to both the content and objectives of the intervention. However, similar information was presented in the handouts given to interested research participant candidates. Pretest sensitization is more likely to be a factor when the pretest is a self-report measure of personality or attitude (Gall et al., 2007), which is what the LCSAT is. However, this is

noted to be a positive effect on learning; since the overall goal of this research project was to influence knowledge and attitudes on TFL, and administration of a pretest is crucial to solid experimental design, it is noted as more of a reality than a threat in this study.

This overview of the threats to the validity of these results allows the reader to consider the multiple factors involved in designing a robust experimental research design. The reader is encouraged to consider all of these parameters in drawing conclusions.

### Evaluation of Qualitative Results

To add a further level of assurance to this study, qualitative investigation was woven throughout the project. However, data collection did not reach saturation, which is defined as the point at which no new information or themes are observed in the data (Merriam, 1998). It is a limitation of this study that constraints of time and resources did not permit further qualitative data collection. Nonetheless, there was enough commonality in the themes and concepts to conclude that these informants affirmed that their leadership knowledge and ability increased. Due to these limitations, it is not possible to widely generalize the findings of this study. Rather, the reader is advised to consider Patton's (1990) argument, that qualitative research provides perspective, rather than absolute truth (in Merriam, 1998). The qualitative findings in this study add deeper insight and perspective in answering the research questions. Further limitations of the findings will be discussed below.

### Limitations and Further Recommendations

The limitations of this study were primarily issues of sample size and depth of inquiry. Demands of time and cost are realities in all research endeavors, but they are



particularly challenging in studies occurring in rural areas. Travel distance alone is a significant factor that deters in-depth or ongoing intervention research in rural settings. The number of educational intervention sessions needed to most effectively develop and sustain characteristics of TFL in NNM is unknown. Additional research that compares interventions with varying session length is needed to determine the “dose” needed to effect change in leadership knowledge and ability.

The problem of attaining an adequate sample size in this study led to the decision to include nurse educators, instead of including solely nurses employed in traditional management and administrative roles. While these different positions share many commonalities, it is acknowledged that there are distinctions. It cannot be stated with assurance that results of this study would have been the same using a sample exclusively comprised of nurses in traditional unit management positions.

The experimental design of this study could have been strengthened with a multi-site design. Indeed, the problem of low sample size could be overcome if multiple sites were used. Further research is warranted, especially in rural areas including both Magnet-aspiring and non-Magnet-aspiring facilities. It was thought by the researcher that a Magnet-aspiring hospital would have the resources and motivation to support an educational intervention to develop characteristics of TFL in NNM, but perhaps facilities not yet on the Magnet journey would also welcome and support this type of research.

Limitations to the qualitative design and interpretation of qualitative results center on the degree to which confirmability and trustworthiness of the study could be established. The validity procedures outlined by Creswell and Miller (2000) in Chapter III included triangulation, member checking, audit trail, disconfirming evidence,

prolonged engagement in the field, thick and rich description, researcher reflexivity, collaboration, and peer debriefing. The addition of another investigator to conduct the evaluation session or inclusion of a post-intervention focus group led by another researcher would have enhanced trustworthiness. If more of the NNM participants had weighed in with their impression of the validity of the data analysis, results could be considered stronger. Use of scrupulous documentation practices to create a more complete audit trail would have strengthened confirmability and may have added to researcher reflexivity. As mentioned previously, time and distance constraints did not allow sufficient time in the field to achieve saturation of data collection. Thick, rich description was not achieved because saturation was not reached. In the first pilot study, NNM were consulted regarding decisions of how best to provide leadership development, but participants in this sample were not; future studies in this area could include collaboration with NNM in designing their own leadership development program. Written feedback from the peer debriefer was not provided, although members of the dissertation committee provided rigorous review. Future qualitative studies in this arena could consider more stringent adherence to the measures that would ensure a higher degree of confirmability.

Due to the distance of the researcher's home base from the study site, the facility contact person was asked to provide significant administrative support, including soliciting participants to enroll and acting as a liaison. While necessary and appreciated, use of this intermediary was a limiting factor in the researcher's ability to communicate with participants and establish rapport. Furthermore, the researcher was cautious in not placing too many demands on any of the participants, including the control group.

Multiple communication attempts and emails were required to keep attrition from becoming even more of a threat than it was. Future research with NNM would be enhanced if the researcher had closer access.

One significant limitation of this study was that the sample was comprised of only women. Since this facility had very few men in nursing leadership positions, it could not be expected to provide a sample representative of males in nursing. The effect that the total lack of input and perspective from even one male participant had on results is not possible to estimate. It is strongly recommended that future research in leadership development in NNM include the male voice.

It is unknown if the measured and reported change in both leadership knowledge and ability will be sustained in this sample. Gall et al. (2007) suggest repeating the posttest at a later date in repeated measures experimental designs to strengthen findings. Due to time limitations, a second posttest was not included in this study, but could be done in a future replication of this study. A focus group with the experimental group distant from the time of intervention could add depth of information, as well.

There is ample evidence that ongoing mentoring is a necessary component to leadership development (Bally, 2007; Jeans, 2006; Leners, Wilson, Connor, & Fenton, 2006). This intervention was not designed to specifically provide mentorship, though it is hoped that the participants may seek it out themselves as a result of this project. In fact, there was evidence in both the quantitative and qualitative results that participants will do just that, but to what degree is unknown. An educational intervention designed in tandem with a formal mentorship program could shed additional light on the research questions.

The research problem that spurred this study was retention of nurses in a time of an ominous nursing shortage. Further research that directly links an educational intervention to develop characteristics of TFL in NNM with retention of staff nurses subordinate to those NNM would be informative.

The LCSAT was created with senior baccalaureate nursing students in mind (Grossman & Valiga, 2005). This instrument may not be as sensitive a research tool for the intended sample of NNM. Pairing it with another established leadership measurement tool could strengthen investigation into validity of the LCSAT for practicing nurses and NNM. The Multifactor Leadership Questionnaire (MLQ) is one of the most widely used instruments available for measuring traits consistent with TFL in the organizational sciences (Mindgarden, 2007). If the cost could be supported, using the MLQ in addition to the LCSAT would provide more data for an informed decision of which research tool to use in answering these and similar research questions.

#### Relevance to Other Research Findings

This study validated certain research findings from other studies noted in the review of the literature. Specifically, TFL had been suggested as an excellent model for empowering nurses, which is a factor in retention (Force, 2005; Sofarelli & Brown, 1998; Welford, 2002). Qualitative findings in this study support the conclusion that participants felt empowered, as evidenced by such statements as: “This is really helping me . . . like I said before I’m very much a bedside nurse and I have an opinion, you know, that you’re not a nurse unless you’re doing bedside care, which is breaking, thank gosh” (Maria, p. 13).

We were talking just yesterday about when we went to a conference [on] . . . how to identify an issue [and now I’m saying] let’s bring those resources to the table

and let's have that discussion. Is this truly an issue that needs education? Or is it just a matter of holding people accountable? (Alice, p. 9)

O'Neil et al. (2008) found that frontline and midlevel nurse leaders were often left out of the leadership development programs developed by hospital administrators, to the detriment of healthcare organizations. Participants in this study affirmed that they were ready and eager to be included in this type of professional development. The positive quantitative written evaluations indicated that the forum of the educational intervention was conducive to meeting their learning needs. This study did not directly link NNM leadership development with improved staff nurse retention or patient outcomes; further inquiry in this area may be needed to influence senior healthcare administrators and spur them to provide educational interventions and professional development resources for this population.

Participants in this study echoed the findings of other researchers (Oroviogicoechea, 1996; Sanders et al., 1996) who found that the conventional nursing practice of placing clinically competent nurses into leadership positions was potentially detrimental to organizational effectiveness. Participants also validated Stanley's (2006) findings when these novice leaders cited the stress of role conflict as they experienced the burden of trying to develop budding leadership skills, while still being expected to regularly provide patient care.

The significant improvement in the perceived readiness of members of the experimental group to lead confirmed findings of other researchers who have posited that TFL can be developed in individuals who are in leadership positions (Day et al., 2004; Leach, 2005; Matey, 1991; C. K. Wilson & Porter-O'Grady, 1999). Results of this study

may encourage healthcare administrators to invest in similar leadership development programs and educational interventions with NNM.

Surfacing in this study was the difficulty in providing any kind of time-intensive continuing education or leadership development to this population of busy NNM, while they struggled to balance multiple urgent priorities. This hurdle had been encountered in the two previous pilot studies as well as by other nursing researchers (Phelps, 2005; Sanders et al., 1996). The tension and conflict the participants reported in leaving their units to attend the educational intervention emerged several times during sessions, in the final audio-taped qualitative evaluation session, and in the final written evaluations. However, as one person commented in the final evaluation session: “I just had to adjust my schedule in advance so I was here. So I don’t know that you’re going to find a perfect time . . . but I don’t think that should stop us from trying to do stuff. Just set it” (Alice, p. 4).

#### Relevance to Educational Psychology Theories

This research project incorporated the concepts of three specific educational psychology theories: (a) the relationship between knowledge and belief; (b) self-regulatory knowledge; and (c) situated cognition, specifically, communities of practice. All three of these theories will be revisited to see if their application was successful in this research venture.

Analysis of results from this study supported Dole and Sinatra’s (1998) views that both cognitive and affective components must be considered when trying to shape nursing professionals’ attitudes and beliefs. The Journal Club format prompted the members to be involved in effortful thinking, evaluate their arguments, and analyze

different problems and solutions. Participants in this study engaged in all three of those behaviors during sessions and indicated as such in the data analysis. As one informant stated:

It's too bad that you can't [get] a manager or director to take a nurse who they think has those good leadership skills, and before you stick them in that leadership position, get them some education for a week or something . . . talk to them about leadership skills and what you need to do this position . . . then like, at the end of a week of that training say, is this a good fit or is this not a good fit? (Lucinda, p. 10)

The repeated measures ANOVA did not support a finding of significant growth on the variable of knowledge (LCSAT Part 1), but did show trending in the expected direction. Furthermore, quantitative data on the final written evaluation form buttressed the fact that participants found the educational intervention met their goals for increased support in developing leadership skills.

The repeated measures ANOVA did reveal a statistically significant increase in participants' perception of self as capable of assuming a leadership role (LCSAT Part 2) after the educational intervention sessions. As hypothesized, the Journal Club format promoted interest and a learning goal orientation that was effective in changing existing beliefs about leadership. This validates the combining of cognitive and affective components in an ongoing educational intervention to succeed in reshaping NNM beliefs and attitudes about their own ability to lead. The design of this study did not include an additional experimental group, which could have received an intervention built upon more traditional pedagogical methods (i.e., lecture, PowerPoint presentations) to compare effectiveness with the intervention provided in this endeavor. Such a design would be helpful in more precisely determining to what extent the theoretical framework posited here is truly effective.

Self-regulatory knowledge was considered a key element in planning the educational intervention. The three essential skills for self-regulatory knowledge are planning, monitoring, and evaluating one's learning (Schraw, 2006). The planning phase includes goal setting, activating relevant background knowledge, and budgeting time. Monitoring includes self-testing skills to control learning. The evaluation skill refers to appraising the products and regulatory processes of learning. Participants in this study were asked to draw heavily upon all three facets of self-regulatory learning. Planning was evidenced by setting goals for attendance, reading the materials, and joining in the discussion. All members activated relevant background knowledge and frequently cited what they had learned in formal online education courses, other leadership or management training, and daily experience. Budgeting time to participate fully was cited as an obstacle, but 77% of the experimental group was able to remain for the duration of the study. Monitoring behaviors were seen as members of the Journal Club sought validation and reinforcement from others in the group. Participants also asked questions and sought feedback from the researcher. Statements made in the sessions were frequently prefaced with, "Well, I've only been in this position for a little while, but . . . ." Evaluation of learning was evidenced by participants' desire for group feedback as well as curiosity to see their LCSAT scores. A lively discussion was generated in appraising the end result of this process of learning.

The community of practice (Journal Club), based on the theory of situated cognition (Lave & Wenger, 1990), was well received by all participants. Quantitative and qualitative data supported the finding that the peer support provided through an opportunity to meet others in similar roles and tackling a learning challenge together



were conducive to their learning. Participants in this study frequently expressed a desire for support, mentoring, and practice. Comments were made throughout the sessions indicating that within the community of practice of the Journal Club, new relationships were forming that could sustain further leadership development after the educational intervention was completed. Equally encouraging were the statements made regarding existing relationships with workplace supervisors; these comments suggested these NNM saw their colleagues in a new light as potential mentors.

Some individuals demonstrated increased knowledge of characteristics of TFL and expressed pleasure at their improved score from pretest to posttest. While statistical analysis did not reflect a significant change between groups on the dependent variable of knowledge, qualitative data revealed some participants felt they increased their knowledge of TFL. This finding affirmed the decision to use a mixed-method research approach. As stated earlier, all research methods are somewhat fallible. Quantitative measures do not always capture individual change. From the qualitative perspective, any perception the learner has of increased knowledge or change in beliefs or attitudes is valued as the individual's unique perspective. The fact that the LCSAT results did not fully align with the qualitative results presents an intriguing opportunity for further research.

It is particularly interesting that in both the pilot study that used the LCSAT and the present study, participants with the most nursing and leadership experience demonstrated a decrease in the LCSAT Part 1 score (knowledge) from pretest to posttest. While this was initially disconcerting to those participants and puzzling to the researcher, it presents a research opportunity to further investigate the cause. The reason for these

results may be as the participants themselves supposed: “Maybe you don’t know what you thought you did . . . after all the readings and discussion [you] are just rethinking [it], you know? What is a good leader?” (Veronica, p. 2). Additional inquiry into knowledge development, especially comparing NNM with longevity in the profession to those who are less experienced, may shed light on how attitudes and beliefs are shaped.

As has been stated before, it is especially challenging to achieve a sample of NNM adequate in size to draw valid conclusions from a quantitative study design alone. Coupled with that imperative is the need to maintain a group size small enough to promote the intimacy needed for learners to feel safe in open dialogue. It is this environment in a community of practice that allows for critical self-reflection and personal growth. The participant data indicating that the small groups facilitated peer support and learning validates the findings of other researchers (Fay et al., 2002; Lowry et al., 2006) that approximately six participants is the optimal group size for similar learning endeavors in leadership development.

#### Relevance to Nursing Knowledge and Patterns of Knowing

Foundational to this study was the strategy to invoke nursing knowledge, particularly nursing’s unique patterns of knowing that addressed the “motives, intentions and traits of character” that Carper (2004, p. 226) stressed. Other leadership development programs may be effective in encouraging leadership knowledge and ability, but this research project specifically sought to highlight nursing patterns of knowing to increase knowledge and ability in the style of TFL for nurses. The findings from this research support the belief that development of TFL in NNM can be successful in a framework of nursing science, rather than solely in the organizational and management fields.

Participants in this study particularly warmed to learning about and discussing ethical and personal ways of knowing. While expressing appreciation and interest in reading and discussing nursing research articles, participants grew more enthusiastic when dialogue turned to practical wisdom, or praxis and phronesis as described by Connor (2004), related to the development of nursing knowledge. Members of the Journal Club had no difficulty in drawing on daily experience to highlight challenges in acquiring ethical knowledge. Participants were able to share personal knowledge with more confidence than when discussing research or empirical knowledge. This justifies the recommendation that for future leadership development, educational interventions should be explored that focus on various patterns of nursing knowledge, rather than solely empirical.

### Conclusion

This research study found that an educational intervention framed in theories of transformational leadership, educational psychology, and nursing patterns of knowledge was successful in increasing leadership knowledge and ability in NNM. The mixed-method research design met the goal of limiting the fallibilities of either quantitative or qualitative methodology alone. The synergy of using a quantitative measure (LCSAT) in tandem with qualitative inquiry brought forth new information on how NNM can develop leadership knowledge and ability. Carper's (1978, 2004) patterns of nursing knowledge were used to present the theory of transformational leadership and synthesize new knowledge for the nursing profession. Study results supported principles from educational psychology as relevant to nursing knowledge development. Even amidst the

myriad problems facing the nursing profession today, this study's findings indicate that solutions may be found through the lens of nursing science itself.

In spite of the limitations discussed earlier in this chapter, there is further evidence that this study made a significant difference for the participants and perhaps rippled through the setting. In a recent contact with this hospital, the Chief Nursing Officer communicated to the researcher that the experimental group participants had shared with other employees not only the nursing literature, but also their excitement in the experience of the Journal Club. The researcher was invited back to the setting to repeat the educational intervention, as had been discussed at the inception of the project. It can be deduced from this positive feedback after the conclusion of the study that the participants, as well as the hospital administrators, viewed the educational intervention as effective.

Perhaps the most hopeful conclusion is stated best by one of the research participants herself in replying to the request for confirmation of interpretation of qualitative results after the study ended: "What I thought was interesting was that my results pre and post were about the same and said that I had a good perception of myself as a leader and good leadership skills. . . I don't have the confidence yet to believe that, but I'm working on it!" (Lucinda, personal communication).

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APPENDIX A

UNIVERSITY OF NORTHERN COLORADO IRB



UNIVERSITY of  
**NORTHERN COLORADO**  
Institutional Review Board (IRB)



September 25, 2008

## STUDENT'S COPY

TO: Teresa McDevitt  
School of Psychological Sciences

FROM: SPARC

RE: Exempt Review of *Educational Intervention to Develop Qualities of Transformational Leadership in Novice Nurse Managers*, submitted by Mary Kay Goetter (Research Advisor: Vicki Wilson)

The above proposal is being submitted to you for exemption review. When approved, return the proposal to Sherry May in SPARC.

I recommend approval.

  
Signature of Co-Chair

10/5/08  
Date

The above referenced prospectus has been reviewed for compliance with HHS guidelines for ethical principles in human subjects research. The decision of the Institutional Review Board is that the project is exempt from further review.

IT IS THE ADVISOR'S RESPONSIBILITY TO NOTIFY THE STUDENT OF THIS STATUS.

Comments: *revised consent form*

25 Kepner Hall ~ Campus Box #143  
Greeley, Colorado 80639  
Ph: 970.351.1907 ~ Fax: 970.351.1934

APPENDIX B  
WYOMING MEDICAL CENTER IRB

## Wyoming Medical Center

### Office of the Medical Staff

Mark E. Dowell, MD, Chief of Staff  
James L. Orford, MD, Vice Chief of Staff  
Eugene Ograd, MD, Chief Medical Officer  
Susan B. Karavitis, CPMSM, Medical Staff Director

1233 East Second  
Casper, Wyoming  
82601  
307-577-2191  
307-577-2265 - Fax

November 4, 2008

Julie Cann, RN  
Wyoming Medical Center  
1233 East Second Street  
Casper, Wyoming 82601

Re: Educational Intervention to Develop Qualities of Transformational Leadership in Novice Nurse Managers

Dear Ms. Cann: *Julie*

The above mentioned study was approved by the Wyoming Medical Center Institutional Review Board on October 16, 2008 and expires October 16, 2009. The informed consent dated October 16, 2008, is enclosed with this letter.

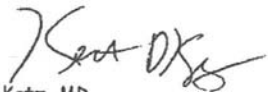
The study is approved by the IRB to be performed at Wyoming Medical Center, 1233 East Second Street, Casper, Wyoming with you as the principal investigator under the following conditions:

- The protocol is adhered to and followed.
- The informed consent that has been approved is properly executed for each patient enrolled in the study and you or the sub-investigators personally sign each informed consent as the investigator on the line noted Signature of Investigator.  
Any adverse events occurring in the study be reported in writing to the Institutional Review Board immediately.

If there are any changes in the protocol, the informed consent, or your malpractice coverage you will need to submit these changes to the IRB for approval before proceeding with the study.

If I can be of any additional assistance please contact me.

Sincerely,



Kent Katz, MD  
Chairman, Institutional Review Board

cc: committee file  
Informed Consent dated October 16, 2008

APPENDIX C  
INFORMATIONAL FLYER

## Opportunity to Participate in Original Research

**WHO:** Nurses who have been employed in nursing management/administrative positions less than 3 years and are willing to participate in a research project.

**WHAT:** Journal Club format: experimental study on nursing leadership.

**NOTE:** Participants assigned to control group will only be asked to fill out a brief survey at the beginning and end of the study. Participants assigned to intervention group will be asked to attend ALL sessions.

**WHEN:** Oct-Nov 2008: TBD

**WHERE:** WMC Meeting Room: TBD

**HOW LONG:** Four sessions, 90 min each (there will be a fifth optional session).

**WHY:** Nurse managers elsewhere have identified mentorship and ongoing support as necessary for their own leadership development. You will earn 10 contact hours. This is a requirement for the researcher's doctoral studies at the University of Northern Colorado.

**Questions? Contact either number below**

**Lead Investigator:**

**Mary Kay Goetter**

**307-286-2909**

**WMC Clinical Nurse Specialist:**

**Julie Cann-Taylor**

**577-2139**

APPENDIX D  
CONSENT FORM

UNIVERSITY of  
NORTHERN COLORADO



Lead Investigator

Mary Kay Goetter, MSN, RNC. NEA-BC  
Wyoming State Board of Nursing  
Office: 307-777-6121  
Cell: xxx-xxx-xxxx  
e-mail: [marykay.goetter@gmail.com](mailto:marykay.goetter@gmail.com)

Research Advisor

Vicki Wilson, PhD, RN  
UNC School of Nursing  
Office: 970-351-1295  
Cell: xxx-xxx-xxxx  
e-mail: [Vicki.wilson@unco.edu](mailto:Vicki.wilson@unco.edu)

Informed Consent for Participation in Research  
University of Northern Colorado

Project Title: Educational Intervention to Develop Qualities of Transformational  
Leadership in Novice Nurse Managers

Dear Colleague,

I am a doctoral student at the University of Northern Colorado studying leadership in nursing. I am conducting research about knowledge and perceptions of leadership and what types of leadership development could be helpful to nurse managers and administrators. The information generated in this experimental study will be used to develop education programs for nurse managers and administrators. Results may be submitted for publication in a peer-reviewed nursing journal.

If you give your consent to participate, you will be assigned to a group. The group may or may not be asked to participate in a Journal Club. Everyone will be asked to complete a pre- and post-assessment, a brief demographic survey, and an evaluation. Participants assigned to the control group will not be in the Journal Club but will be asked to fill out the surveys at the beginning and end of the project; expected time commitment is about one hour total. There is no way to know or request which group you will be assigned to ahead of time.

Participants assigned to the Journal Club group will meet for four (4) 90-minute sessions in one of the hospital meeting rooms in your workplace. You will be given one-three pieces of nursing literature to read with a few discussion questions to think about before each of the sessions. Then the group will meet and discuss the questions and your thoughts and ideas about the nursing literature article(s). There will be a fifth optional session at which time the results of your pre- and post-assessment will be given directly to you and participants will discuss their thoughts about the sessions. This last session will be audio recorded so that I am able to capture comments, ideas

and suggestions from the participants. No one's name will be written down or attributed to any of the comments.

Your choice of whether or not to participate in this study will be held confidential by the researcher. However, if you choose to participate, other participants may be aware of your participation. All of your responses to the questions in the demographic survey and the pre- and post-assessments will be held as confidential. All of the data I collect, including any of the notes that I take during sessions will be coded to protect your identity. All the data from this study will be kept locked in a secure location and destroyed 5 years after this research project is complete. In addition, copies of the consent form will be stored in a locked file cabinet in my advisor's office at the University of Northern Colorado to comply with federal guidelines for Institutional Review Boards. The audiotape will be destroyed as soon as the comments have been transcribed. I will do everything possible to protect your confidentiality, but there is a risk that other participants may share information and discussions that take place in the Journal Club with other people. The Institutional Review Boards of the University of Northern Colorado and Wyoming Medical Center have reviewed and approved this project. If you have any questions, please contact me directly or my research advisor, Dr. Vicki Wilson (contact information above).

The program has pending approval for 10 contact hours of continuing education. Those who participate in all 4 sessions of the Journal Club will have the option to sign up for contact hours; however, the records associated with documentation of continuing education will not be confidential (Wyoming Hospital Association will have your name and contact information on a roster) but the decision to apply for contact hours is entirely voluntary and not required for participation in the research project.

If the administrators of Wyoming Medical Center so desire, they will have the option to ask the researcher back at a later date to repeat the educational offering and opportunity for contact hours for members of the control group or any other nurses employed in leadership positions.

Risks to you include the possible discomfort of sharing your views in a group format, being asked questions or feeling challenged by other group members or the facilitator (researcher); however, these risks are no more so than you are likely to encounter in everyday meetings, educational sessions or communications with colleagues. Participation in discussion and reflection or reviewing the results of your leadership assessments may cause you some discomfort. You may feel that the time spent in the sessions or reading nursing literature is wasted. Possible benefits to you include the opportunity for professional development in the forum of a Journal Club and the opportunity to earn 10 contact hours.

Your participation is entirely voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not affect your employment status or result in loss of benefits to which you may otherwise be entitled. The researcher is not affiliated



with Wyoming Medical Center, but is employed by the Wyoming State Board of Nursing (WSBN). This research study is entirely unrelated to the WSBN or the researcher's position at the WSBN. Your decision of whether or not to participate, or how you respond during the course of the study has no bearing whatsoever on your licensure or status with the WSBN. Having read the above and having had an opportunity to ask any questions and seek clarification, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any questions about your selection or treatment as a research participant, please contact the Sponsored Programs and Academic Research Center, Kepner Hall at the University of Northern Colorado, Greeley, Colorado 80639 or call 970-351-1907. Thank you!

---

Participant's Signature

---

Date

---

Researcher's Signature

---

Date

UNIVERSITY OF NORTHERN COLORADO

Gunter Hall, Campus Box 125, Greeley, CO 80639-0105 • Office 970-351-2293 Fax  
970-351-1707 [www.unco.edu](http://www.unco.edu)

APPENDIX E  
TFL WORKBOOK

Running head: TFL

Developing Transformational Style of Leadership: A Workbook  
for Nurse Managers/Administrators  
Mary Kay Goetter

Developing Transformational Style of Leadership: A  
Workbook for Nurse Managers/Administrators

Introduction

Welcome to Leadership Development for Nurse Managers/Administrators! Leadership in Nursing is a complex topic that needs more research and study to determine how best to develop characteristics of effective leadership in nurse managers and administrators. This educational program will be formatted as a Community of Practice; i.e., those of you who are practicing as nurse managers, educators and administrators will learn from each other in a community forum. We will meet for four sessions of 90 minutes each to share your ideas and reflections on the readings and how they may relate to your own personal leadership development.

Background Information

There are four hallmarks of transformational leaders:

1. *Idealized influence* describes leaders who are exemplary role models for associates. Leaders with idealized influence can be trusted and respected by associates to make good decisions for the organization.

2. *Inspirational motivation* describes leaders who motivate associates to commit to the vision of the organization. Leaders with inspirational motivation encourage team spirit to reach goals of increased revenue and market growth for the organization.
3. *Intellectual Stimulation* describes leaders who encourage innovation and creativity through challenging the normal beliefs or views of a group. Leaders with intellectual stimulation promote critical thinking and problem solving to make the organization better.
4. *Individual consideration* describes leaders who act as coaches and advisors to the associates. Leaders with individual consideration encourage associates to reach goals that help both the associates and the organization (Hall, Johnson, & Kepner, 2002).

Each session will touch on one of these hallmarks with some items to read, reflective worksheets to fill out, and thought-provoking questions.

~~~~~

#### Session 1: Idealized Influence

Learning activities: read the following two articles:

Hall, J., Johnson, S., & Kepner, K. (2002).

*Transformational leadership: The transformation of managers and associates.*

Williams, L. J., (2006). The fair factor in matters of trust. *Nursing Administration Quarterly*, 30(1). 30-37.

Complete pre-assessment: Leadership Characteristics & Skills Self-Assessment (if not already done)

Complete demographic questionnaire

- Leadership Assessment Tables (Barker, Sullivan, & Emery, 2006, pp 14 & 21)
- Discussion points: Consider the following quote:  
 "Entering into trusting relationships requires a willingness to open ourselves to unflattering possibilities in regard to what we will learn.  
 Trusting relationships involve not only risk but also the courage to be vulnerable as nurses are encouraged to voice their perspectives" (Williams, 2006, p. 31).
- Think about and discuss a time when you have taken a risk in establishing trust among your colleagues.
- Discuss ways that you can build trustworthiness within yourself, i.e., how might you proceed in your role as NM that encourages staff and colleagues to view you as a trustworthy person?

- Hall, Johnson & Kepner state that a weakness of transformational leadership is that it can lead to abuse of power. Discuss how someone in your position might abuse power and break trust.
- Reflection points: do I walk the talk? Do I see myself as powerless against the tide of the organization? Do I believe that I can promote growth within my own sphere of influence? Do I set mutual goals with my staff and colleagues?

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## Session 2: Inspirational Motivation

Read the following: DiMeglio et al. (2005). Group cohesion and nurse satisfaction and Poem, "If", Rudyard Kipling

### Discussion Points:

- Think of a team you have been on that was successful; what made it so?
- Consider the following quote from DeMeglio et al, 2005, "How group members held each other accountable for the content and quality of their verbal and nonverbal communication became the intended focus of long-term work for every group" (p. 116). How do you hold others

accountable for the quality of verbal and non-verbal communication within your work groups?

- What is your vision for your unit? How does that mesh with the organizational vision?
- How can you "keep your head when all about you are losing theirs and blaming it on you"?

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### Session 3: Intellectual Stimulation

Read the following: Vivar, C. G. (2006). Putting conflict management into practice: A nursing case study.;

Dickerson, P. S. (2005). Nurturing critical thinkers.

Handouts: Harvey, J. The Road to Abilene; The Cow Path

Discussion points:

- Dickerson (2005) says "The principles of critical thinking are problem identification, formulation of statements of knowledge or belief, examination of the potential fallibility of each statement, use of deductive and inductive reasoning to move between unique features and generalizability of data, and exploration of how data can best be used in a particular case to facilitate goal achievement" (p.69). Discuss a recent case within your unit where



some of these elements of critical thinking were used.

- How do you seek clarification from your colleagues when solving problems?
- Vivar (2006) says, "It has been shown that nurses in leadership positions do not spend sufficient time on conflict resolution" (p. 204). Comment on this.
- Do you think conflict lead to growth? Why or why not?
- Have you ever been on the road to Abilene? How did it happen?
- How do we get off the cow path?
- Reflection points: how do I really view conflict? Am I on a cow path or blazing my own trail?

~~~~~

#### Session 4: Individual Consideration

Read the following: Milton, C. L. (2004). The ethics of personal integrity in leadership and mentorship: A nursing theoretical perspective; Wilson, V. W., Leners, D. W., Fenton, J., & Connor, P. (2005). Mentorship: Developing and inspiring the next generation of nursing leaders; Bethune et al.; Bethune, G., Sherrod, D., & Youngblood, L. (2005). 101

Tips to retain a happy, healthy staff. Handouts:

Mentoring myths

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Workplace Values Exercise

Discussion points:

- Who is mentoring you?
- Who are you mentoring?
- What value is there for you in being in a mentoring relationship?
- Mentorship is portrayed by Wilson et al as a gardening metaphor and by Milton as an "unfolding drama or art of leadership": which metaphor do you relate to in considering mentoring relationships in your own life?
- What ethical and personal integrity issues do you see in your own mentoring relationships?
- Reflection points: Am I living my values in the workplace? Or am I just biding my time? What can I do to create harmony between my personal values and the workplace?

Complete session evaluation forms.

## References

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- Dickerson, P. S. (2005). Nurturing critical thinkers. *The Journal of Continuing Education in Nursing*, 36(2), 68-72.
- DiMeglio, K., Padula, C., Piatek, C., Korber, S., Barrett, A., Ducharme, M., et al. (2005). Group cohesion and nurse satisfaction. *Journal of Nursing Administration*, 35(3), 110-120.
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- Williams, L. J., (2006). The fair factor in matters of trust. *Nursing Administration Quarterly, 30*(1). 30-37.
- Wilson, V. W., Leners, D. W., Fenton, J., & Connor, P. (2005). Mentorship: Developing and inspiring the next generation of nursing leaders. *Nurse Leader, 12*, 44-47.

APPENDIX F  
DEMOGRAPHIC SURVEY

**Project Title: Educational Intervention to Develop  
Qualities of Transformational Leadership in Novice Nurse  
Managers**

1. How long have you been a nurse?
2. How long have you been in a management position?
3. Did you attend "Nurse Manager Boot Camp"?      YES      NO
4. Did you attend any other education program specifically  
for nurse managers or administrators?  
  
                 YES                      NO
5. If so, how long ago?
6. Do you currently feel that you are in a relationship  
where you are being mentored as a nursing leader?  
  
                 YES                      NO
7. Gender              MALE                      FEMALE
8. Age      25-35 years      36-45 years      46-55 years  
                 older than 55 years
9. *Circle highest level of educational preparation AS A*  
NURSE:              ADN              BSN              MSN
10. Circle highest level of educational preparation NOT IN  
NURSING (i.e., you have an ADN in nursing but a  
baccalaureate degree in business or something else)  
Baccalaureate                      Master's                      None  
Indicate what area this degree is in  
  
\_\_\_\_\_

APPENDIX G  
THE LEADERSHIP CHARACTERISTICS AND SKILLS  
ASSESSMENT TOOL (LCSAT)

**The Grossman & Valiga Leadership Characteristics  
and Skills Assessment**

**Directions:** **Part 1** lists statements that are useful in determining a person's perception of what makes a good leader. **Part 2** lists skills that are useful in determining a person's ability to lead. Answer "**SA**" to those statements with which you Strongly Agree and "**A**" to those statements with which you Agree. Answer "**D**" to those statements with which you Disagree and "**SD**" to those statements with which you Strongly Disagree.

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Grossman, S. C., & Valiga, T. M. (2005). *The new leadership challenge: Creating the future of nursing* (2nd ed.). Philadelphia: F. A. Davis Company.

**PART 1**

|   | Statement  | SA | A | D | SD |
|---|--|----|---|---|----|
| 1 | Leaders are very creative.   |    |   |   |    |
| 2 | The most important goal of a leader is to be sure the job gets done. |    |   |   |    |
| 3 | Leaders should focus on people, NOT on the system.                   |    |   |   |    |



|    |   |  |  |  |  |
|----|---|--|--|--|--|
| 4  | One does not need to be in a position of authority to be a leader.                      |  |  |  |  |
| 5  | Credibility is an important characteristic of a leader.                                 |  |  |  |  |
| 6  | Leaders tend to be people with high energy who are passionate about their work.         |  |  |  |  |
| 7  | Leaders focus more on being creative than on accomplishing their vision or goal(s).     |  |  |  |  |
| 8  | Persistence is a trademark of an effective leader.                                      |  |  |  |  |
| 9  | Leaders are committed to their vision and tend not to adapt to change well.             |  |  |  |  |
| 10 | Leaders are good at empowering others to grow.  |  |  |  |  |
| 11 | It is important for leaders to have a dream and to be future-oriented.                  |  |  |  |  |
| 12 | A person's ability to lead in a professional setting depends on his or her self-esteem. |  |  |  |  |
| 13 | A leader's style of leading is determined by the situation and/or task at hand.         |  |  |  |  |
| 14 | A good leader must have integrity.  |  |  |  |  |
| 15 | Leaders mentor others to assist them in pursuing their dreams.                          |  |  |  |  |
| 16 | Leadership is a quality one is born with, and it cannot be acquired.                    |  |  |  |  |
| 17 | Good leaders help others to resolve conflict.   |  |  |  |  |
| 18 | One does not need to be an excellent critical thinker in order to be a great leader.    |  |  |  |  |
| 19 | A good leader should have excellent communication skills.                               |  |  |  |  |
| 20 | Leaders always follow the rules.  |  |  |  |  |

## PART 2

|   | Statement  | SA | A | D | SD |
|---|--|----|---|---|----|
| 1 | I value integrity higher than power.                                   |    |   |   |    |
| 2 | People tend to think I have the ability to influence others.           |    |   |   |    |
| 3 | I feel confident about my knowledge base and skills, given my years of |    |   |   |    |

|    |  |  |  |  |  |
|----|--|--|--|--|--|
|    | experience.  |  |  |  |  |
| 4  | I have a definite dream for where I want to be in my profession.                   |  |  |  |  |
| 5  | I have mentored another person and found the experience rewarding.                 |  |  |  |  |
| 6  | Change usually makes me feel nervous, and I tend to lose my self-confidence.       |  |  |  |  |
| 7  | I feel energized taking risks unless they are life threatening.                    |  |  |  |  |
| 8  | I do not feel confident calling a physician about my patient's status.             |  |  |  |  |
| 9  | When I experience conflict, I usually give in and accommodate the other person.    |  |  |  |  |
| 10 | I feel I do make a difference as a nurse and plan to continue to do so.            |  |  |  |  |
| 11 | Since I am only a nurse I am not responsible for patient care medical errors.      |  |  |  |  |
| 12 | I often follow others when I am not sure what to do about something.               |  |  |  |  |
| 13 | I notice I agree with others easily unless the issue is very dear to my heart.     |  |  |  |  |
| 14 | I attempt to empower ancillary workers because I find the team spirit is enhanced. |  |  |  |  |
| 15 | Personally, I do not really have a vision as to where I plan to be in a few years. |  |  |  |  |
| 16 | I enjoy conflict and rarely compromise my needs.                                   |  |  |  |  |
| 17 | I am an autonomous person.   |  |  |  |  |
| 18 | I have been told I am extremely reliable and dependable.                           |  |  |  |  |
| 19 | I have great passion for my nursing career.  |  |  |  |  |
| 20 | It is important to me to think about and plan for the future.                      |  |  |  |  |

**PART 2**

|    | <b>Statement</b>   | <b>SA</b> | <b>A</b> | <b>D</b> | <b>SD</b> |
|----|--|-----------|----------|----------|-----------|
| 1  | I value integrity higher than power.   |           |          |          |           |
| 2  | People tend to think I have the ability to influence others.                       |           |          |          |           |
| 3  | I feel confident about my knowledge base and skills, given my years of experience. |           |          |          |           |
| 4  | I have a definite dream for where I want to be in my profession.                   |           |          |          |           |
| 5  | I have mentored another person and found the experience rewarding.                 |           |          |          |           |
| 6  | Change usually makes me feel nervous, and I tend to lose my self-confidence.       |           |          |          |           |
| 7  | I feel energized taking risks unless they are life threatening.                    |           |          |          |           |
| 8  | I do not feel confident calling a physician about my patient's status.             |           |          |          |           |
| 9  | When I experience conflict, I usually give in and accommodate the other person.    |           |          |          |           |
| 10 | I feel I do make a difference as a nurse and plan to continue to do so.            |           |          |          |           |
| 11 | Since I am only a nurse I am not responsible for patient care medical errors.      |           |          |          |           |
| 12 | I often follow others when I am not sure what to do about something.               |           |          |          |           |
| 13 | I notice I agree with others easily unless the issue is very dear to my heart.     |           |          |          |           |
| 14 | I attempt to empower ancillary workers because I find the team spirit is enhanced. |           |          |          |           |
| 15 | Personally, I do not really have a vision as to where I plan to be in a few years. |           |          |          |           |
| 16 | I enjoy conflict and rarely  |           |          |          |           |

|    |   |  |  |  |  |
|----|---|--|--|--|--|
|    | compromise my needs.  |  |  |  |  |
| 17 | I am an autonomous person.                                    |  |  |  |  |
| 18 | I have been told I am extremely reliable and dependable.      |  |  |  |  |
| 19 | I have great passion for my nursing career.                   |  |  |  |  |
| 20 | It is important to me to think about and plan for the future. |  |  |  |  |

APPENDIX H  
INSERVICE EVALUATION

### Inservice Evaluation/Questionnaire

Date of Program: October- November 2008

Title of Program: Educational Intervention to Develop Qualities of Transformational Leadership in Novice Nurse Managers

Instructor/s: Mary Kay Goetter

#### Teaching methods:

Computer-based learning \_\_\_\_\_ Video \_\_\_\_\_ DVD \_\_\_\_\_ Lecture \_\_\_\_\_

Individual/Self-learning packet   X   Demo/Return Demo \_\_\_\_\_ Group work   X  

#### Please rate the following questions on a 1-4 scale

4 = very well/excellent

3 = well/good

2 = average/fair

1 = not well/poor

N/A/ (not applicable)

- |   |   |   |   |   |     |
|---|---|---|---|---|-----|
| 1. Based on program content, how well were you able to meet the stated objectives for this program?                     | 1 | 2 | 3 | 4 | N/A |
| 2. How effective were the various learning methods?   | 1 | 2 | 3 | 4 | N/A |
| 3. How easy were the written materials to read? (e.g., handouts)  | 1 | 2 | 3 | 4 | N/A |
| 4. How would you rate the quality of teaching materials used?   | 1 | 2 | 3 | 4 | N/A |
| 5. How would rate the quality of nursing literature, computer graphics, PowerPoint presentations used for this program? | 1 | 2 | 3 | 4 | N/A |
| 6. How easy was it to ask questions, or get help from instructors?  | 1 | 2 | 3 | 4 | N/A |
| 8. How conducive to learning was the environment?   | 1 | 2 | 3 | 4 | N/A |
| 9. How effective was the instructor's teaching methods/styles?  | 1 | 2 | 3 | 4 | N/A |
| 10. This program met my goal for increased support in developing my leadership skills.                                  | 1 | 2 | 3 | 4 | N/A |
| 11. The one thing that could help me develop my leadership is _____   |   |   |   |   |     |
| 12. What I liked most about the program?  |   |   |   |   |     |
| 13. What I disliked most about the program?   |   |   |   |   |     |
| 14. Additional comments or suggestions (please write on the back if you need more space)                                |   |   |   |   |     |

